



**PILOT TEST RESULTS FOR ION EXCHANGE RESIN  
AND GRANULAR ACTIVATED CARBON TO TREAT  
GROUNDWATER IMPACTED WITH PER- AND  
POLYFLUOROALKYL SUBSTANCES**

**LA HABRA HEIGHTS COUNTY WATER DISTRICT  
WATER SUPPLY WELL #10**

***Prepared for:***

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Water Replenishment District of Southern California

This report for the Water Replenishment District of Southern California was prepared by GSI Environmental Inc. under the supervision of the Geologist(s) and/or Engineer(s) whose signature(s) appear hereon.

The findings, recommendations, specifications, or professional opinions were prepared in accordance with generally accepted professional engineering and geologic practices. No warranty is expressed or implied.



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**ABBREVIATIONS**

AV – AqueoUS Vets  
DDW – Division of Drinking Water  
EPA – United States Environmental Protection Agency  
DOC – Dissolved Organic Carbon  
EBCT – Empty Bed Contact Time  
ft<sup>2</sup> – Square Feet  
ft<sup>3</sup> – Cubic Feet  
GAC – Granular Activated Carbon  
gpm – Gallons per Minute  
GSI – GSI Environmental Inc.  
IX – Ion Exchange  
lbs - Pounds  
mg/L – Milligrams per Liter  
ng/L – Nanograms per Liter  
NL – Notification Level  
kW – kilowatt  
kWh – kilowatt-hour  
LCCA – Life Cycle Cost Analysis  
LHHCWD – La Habra Heights County Water District  
MCL – Maximum Contaminant Level  
MTBLW – Montebello Land & Water Company  
NOM – Natural Organic Matter  
NPV– Net Present Value  
OCWD – Orange County Water District  
O&M – Operation and Maintenance  
PFAS – Per- and Polyfluoroalkyl Substances  
PFBS – Perfluorobutanesulfonic Acid  
PFHpA – Perfluoroheptanoic Acid  
PFHxA – Perfluorohexanoic Acid  
PFHxS – Perfluorohexanesulfonic Acid  
PFNA – Perfluorononanoic Acid  
PFOA – Pefluorooctanoic Acid  
PFOS – Perfluorooctanesulfonic Acid  
psi – Pounds per Square Inch  
RL – Response Level  
TOC – Total Organic Carbon  
WRD – Water Replenishment District of Southern California

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**EXECUTIVE SUMMARY**

In an effort to meet anticipated drinking water regulations for per- and polyfluoroalkyl substances (PFAS), Water Replenishment District of Southern California (WRD) retained GSI Environmental Inc. to conduct pilot testing to evaluate the performance and life cycle costs for ion exchange (IX) and granular activated carbon (GAC) to treat groundwater impacted by PFAS including perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). GSI's team also includes technical support provided by Hazen and Sawyer and AqueoUS Vets (AV).

The pilot-scale study involved testing the ability of eight types of adsorbent media (four IX resins and four GACs) to remove PFAS from water sourced from La Habra Heights County Water District (LHHCWD) Water Supply Well #10. The site was selected to be representative of typical PFAS concentrations for WRD wells with PFOA concentrations that exceed the current 10 nanograms per liter (ng/L) response level (RL). The results of the 12-month pilot test, were then used to develop 20-year life cycle costs that could be used by WRD well pumpers to select a suitable PFAS treatment media. The pilot skid was built by AqueoUS Vets in collaboration with the GSI Team, who operated the skid during the duration of the test. Empty bed contact time (EBCT) of the GAC test columns were selected to match a typical full-scale GAC EBCT (10 minutes), while a shorter EBCT (1.2 minutes) was selected for IX resin due to concerns over testing duration. The pilot skid was monitored daily, and flowrates were adjusted periodically to correspond with the design pilot test EBCTs of the GAC and IX media. Influent water was pretreated with a 5-micron cartridge filter to prevent fouling. While the pilot skid generally operated effectively over the pilot test duration, periodic well shutdowns and insufficient well supply pressure caused periods of down time throughout the test.

Of the three PFAS with California drinking water RLs, PFOA was consistently observed to be the driver for media changeout. Because the effluent samples for all GACs did not have detectable concentrations of PFOA until the end of the test, linear extrapolation of midpoint breakthrough curves was used to estimate the 10 ng/L PFOA breakthrough times and bed volumes. Of the GACs tested, F400 is anticipated to treat the most water prior to breakthrough at the 10 ng/L RL for PFOA. Of the four tested IX resins, only PFA694E had broken through with respect to the PFOA RL by the end of the test. The same linear extrapolation approach that was applied to the GACs was applied to the three other IX media effluent breakthrough curves to estimate the 10 ng/L PFOA breakthrough bed volumes. Based on the results, PSR2 Plus was determined to be the best performing IX resin.

The overall cost-effectiveness of all tested media was evaluated using life cycle cost analysis that involved the development of cash flows to represent capital and operation and maintenance (O&M) costs. These cash flows were converted to net present value (NPV) for ease of comparison between alternatives. Key assumptions were made to simplify the cost estimation process including a 20-year operational life, lead-lag treatment vessel configuration, exclusion of costs that were equal among alternatives, landfill disposal of spent IX resin, and manufacturers' regeneration of spent GAC. Based on the sensitivity analysis, all media life cycle costs were found to generally have the same level of sensitivity to uncertainty in bed life estimates. Using this approach, the AV1240LDX GAC was found to be the most cost-effective media for removing PFAS from LHHCWD Well #10 with a net present value cost of \$2,920,000, with the PRS2 Plus being a close second at an NPV of \$2,996,000 (a cost difference of \$76,000).

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### **1.0 INTRODUCTION**

On behalf of the Water Replenishment District of Southern California (WRD), GSI Environmental Inc. (GSI) has prepared this report to present the pilot test results for ion exchange (IX) resin and granular activated carbon (GAC) to treat groundwater impacted with per- and polyfluoroalkyl substances (PFAS). GSI's team also includes technical support provided by Hazen and Sawyer and AqueoUS Vets (AV).

### **1.1 Report Organization**

This report is organized as follows:

- Section 1 – Introduction
- Section 2 – Pilot Test Design
- Section 3 – Sampling and Analysis
- Section 4 – Results
- Section 5 – Data Evaluation and Discussion
- Section 6 – Life cycle Cost Analyses
- Section 7 – Conclusions
- Section 8 – References

### **1.2 Background**

PFAS are a group of man-made chemicals that include perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), and many other chemicals. PFAS have been manufactured and used in a variety of industries since the 1940s, and PFOA and PFOS have been the most extensively produced and studied of PFAS. Both chemicals are persistent in the environment and in the human body and exposure to unsafe levels of PFOA/PFOS may result in adverse health effects (USEPA, 2017).

PFOA and PFOS do not currently have maximum contaminant levels (MCLs) in California or at the federal level; however, California State Water Resources Control Board, Division of Drinking Water (DDW) has set notification levels (NLs) and response levels (RLs) for both contaminants. When the concentrations of PFAS exceed their respective NLs in drinking water, the public water system which supplies water directly to the end user must notify the public water system's governing body and the governing body of any local agency whose jurisdiction includes areas supplied with drinking water by the water system. A local agency means a city or county. If the water system is a water company regulated by the California Public Utilities Commission ("Commission"), then the water system must also notify the Commission. When drinking water from a drinking water source with PFAS concentrations exceeding the RLs, the water system may choose to either take a water source out of use, treat the water delivered, or provide public notification as outlined in Health and Safety Code section 116378.

DDW has issued the following recent updates to the NLs and RLs for PFAS:

- In August 2019, the DDW issued updated drinking water NLs of 5.1 and 6.5 nanograms per liter (ng/L), or parts per trillion, for PFOA and PFOS, respectively;
- On February 6, 2020, DDW issued updated drinking water RLs of 10 ng/L for PFOA and 40 ng/L for PFOS; and
- On March 5, 2021, DDW issued drinking water NL and RL of 500 and 5,000 ng/L, respectively, for perfluorobutane sulfonic acid (PFBS).

In addition, Health and Safety Code section 116378, subdivision (c)(1) states that if monitoring results in a PFAS detection that is either left unconfirmed or is confirmed by one to two additional samples, then a community water system or a nontransient-noncommunity water system must report that detection in the annual consumer confidence report.

WRD commissioned the pilot test described in this report to assess the effectiveness and efficiency of several GAC and IX products on the La Habra Heights County Water District Water Supply Well #10 water and to develop typical life cycle costs for treatment of the pumped groundwater using these two types of treatment media (GAC and IX) to meet the RLs for PFOA and PFOS. The pilot test was conducted in general accordance with a work plan entitled “Work Plan for Ion Exchange and Granular Activated Carbon Pilot Tests to Treat Groundwater Impacted with Per- and Poly-fluoroalkyl Substances” dated April 10, 2020 (GSI, 2020). It is intended that the data produced in this report will inform future permitting efforts with the DDW.

### 1.3 Pilot Test Objectives

The objectives for this pilot test were:

1. To evaluate the efficiency and effectiveness of four different types of GAC and four different types of IX resin for PFAS removal. To assess the PFAS breakthrough through these media as well as each media’s ability to remove PFAS compounds to below the RLs.
2. To compare the IX treatment results with the vendors’ predictive models to demonstrate the utility of these models for planning effective water treatment.
3. To estimate water treatment life cycle costs, including both capital and operation and maintenance (O&M) costs for select type of GAC and IX resin.
4. To provide a recommendation as to the most effective treatment option for Water Supply Well #10.

## 2.0 PILOT TEST DESIGN

This section addresses the selection of the pilot test well, the media selection process, and the pilot test design. A description of the criteria that were considered during test well selection is presented in Section 2.1. The treatment media selected for testing are described in Section 2.2. The GSI team coordinated with AqueoUS Vets to design the test skid as described in Section 2.3.

### 2.1 Pilot Study Well Site Selection

Multiple groundwater production wells were considered to provide the source water for the pilot tests. Ultimately, the following two sites were selected:

- SITE #1 - Montebello Land & Water Company Water Supply Well #7 (MTBLW Well #7)
- SITE #2 - La Habra Heights County Water District Water Supply Well #10 (LHHCWD Well #10)

The well sites are shown on **Figure 1**. This report presents the pilot test results of LHHCWD Well #10 (shown on **Figure 2**). The results of MTBLW #7 are presented in a separate report (GSI, 2021). LHHCWD Well #10 was selected because:



- The PFOA and PFOS concentrations exceeded the DDW RLs.
- The well was located near the San Gabriel spreading grounds where surface water percolated into the ground, replenishing the underlying aquifer. These spreading grounds represent a separate groundwater recharge source from the source water feeding another WRD pilot test conducted in Montebello (Rio Hondo River).
- The well could be operated continuously for a long period with minimal shutdown.
- There was adequate space and security at the well location to support the pilot test skid.
- The LHCWD staff could provide day-to-day pilot test technical observations and support.
- The well sulfate concentrations were sufficient such that PFAS breakthrough time for the IX media was expected to be shortened. The presence of elevated concentrations of sulfate may reduce the IX bed life, depending on the resin and its selectivity for sulfate (i.e., sulfate may take up some of the adsorption capacity on the resin surface and decrease the space available for PFAS). This expected reduction in test duration would be helpful, given the limited time available to complete the pilot testing.

The LHCWD and WRD provided the following facility and well details to the GSI team prior to pilot test implementation to aid in the design of the treatment skids and the calculation of projected pilot test duration:

<b>Site Location:</b>	Intersection of Saragosa St. and Norwalk Blvd., Whittier, California (located near the San Gabriel River spreading grounds).
<b>Pumping Rate:</b>	2,200 to 2,400 gallons per minute (gpm)
<b>Discharge pressure:</b>	8 to 20 pounds per square inch (psi)
<b>Notable Water Constituent Concentrations:</b>	PFOA – 11 to 15 ng/L PFOS – 30 to 50 ng/L Sulfate – 130 to 180 milligrams per liter (mg/L) Total organic carbon (TOC) – approximately 0.6 mg/L
<b>Other Considerations:</b>	Treated water from the pilot testing could be discharged through an existing discharge under the facility’s National Pollution Discharge Elimination System permit

## 2.2 Media Evaluated During Pilot Tests

Four unique GAC products and four unique IX resins were used for the pilot test. The process used to select these products for testing is presented in this section. The manufacturers’ specifications for these products are included in **Appendix A**.

### 2.2.1 GAC Selection Process

The four selected GAC products were bituminous coal-based carbon products. Based on the previous GAC pilot studies using different types of carbon published in American Water Works Association Journal in January 2018 (McNamara et al., 2018), coal-based carbon resulted in markedly better PFAS removal than coconut shell-based carbon; therefore, the coconut shell-based carbon was not used for this testing. The GAC products selected were:

Provider	Product Name	Description
AqueoUS Vets®	AV 1240 Coal Base (AV1240CB)	Direct activated virgin bituminous coal carbon
AqueoUS Vets®	AV 1240 LDX (AV1240LDX)	Direct activated low-density virgin bituminous coal carbon
AqueoUS Vets®	AV 1240 PFAS (AV1240PFAS)	Proprietary carbon
Calgon Carbon	Filtrisorb® 400 (F400)	Reagglomerated virgin bituminous coal carbon

As shown in the GAC summary table above, there are two different coal processing methods used in the manufacture of GAC: direct activation and reagglomeration. Direct activated carbon is produced when the source carbon material (in this case coal) is pyrolyzed at high temperatures, typically in an inert atmosphere. Alternatively, this can be accomplished by exposure to oxygen or steam at very high temperatures. This activation process creates an extremely high surface area material. Reagglomeration is the process that converts a raw coal material to a virgin coal GAC. Domestic coal carbons are reagglomerated because the coal raw material is soft and would lose about 50% of its mass to attrition if it were to be direct activated. To prevent this attrition, the carbon is first pulverized to a powder and a binder is added to create coal briquets. The briquets are then activated to produce GAC. Reagglomeration is not a performance enhancing process but necessary to efficiently use the softer domestic coal products with minimal attrition. Both direct activated and reagglomerated carbon were included in the pilot test to assess their PFAS removal effectiveness and to provide additional GAC sourcing opportunities to owners of groundwater treatment systems, assuming the pilot test does not demonstrate a significant performance difference between direct activated and reagglomerated GAC.

The types of GAC that were selected for this pilot test are described below. All four types are 12 x 40 mesh size, which means the majority of GAC media (approximately 90 to 91% by weight) passes through a United States standard size 12 mesh screen but is retained on a standard size 40 mesh screen.

- The AV1240CB is a direct activated 12 x 40 mesh bituminous coal carbon.
- The AV1240LDX is a low density, direct activated 12 x 40 mesh bituminous coal carbon. This low-density characteristic of this bituminous coal carbon is due to the geographical location from where the raw carbon is sourced (mined). The coal is sourced from a country which is not affected by tariffs, reducing purchase cost. Also, the weight of low-density carbon (carbon is sold by the pound) is less to fill the same bed volume. By including a low-density carbon product in this test, the efficiency and economics of this product can be evaluated and compared to the regular density GAC.
- The AV1240PFAS carbon is a new carbon to the market that has shown some promise for PFAS water treatment based on limited product performance data. At the time of selection, AqueoUS Vets® reported that AV1240PFAS carbon had only been tested in a few rapid small-scale column tests (RSSCTs) and few full-scale GAC water treatment sites.

- Calgon F400 is a reagglomerated bituminous coal carbon. F400 was selected for use in the WRD pilot tests due to its demonstrated good performance in previous studies by others (Liu et al., 2019).

The Calgon F400 and two of the AqueoUS Vets® AV carbon products represent commonly-available GAC water treatment products. There are multiple vendors that offer their own branded carbon that are similar to the AqueoUS Vets® AV products (based on our comparison of the product specifications). This provides multiple sourcing opportunities for the pumper that is planning or maintaining a water treatment system. This is also true for the Calgon F400 GAC - Cabot Norit offers a GAC 400 reagglomerated carbon which has similar specifications and may perform similarly. The exception to this comparison is the AV1240PFAS which is a proprietary carbon.

### 2.3 IX Selection Process

There are several PFAS-selective IX resins currently available. Each of these resin products is a “single-use resin” meaning the resin product is used once and then removed for disposal (i.e., not reactivated). Currently, most PFAS resins are disposed by landfilling or incineration. The paragraphs below list each resin and provide a brief description of the product and why it was selected for the pilot test.

- Purofine® PFA694E by Purolite is a polystyrenic gel PFAS-selective single-use ion exchange resin. Purolite is a leader in the current PFAS water treatment market.
- Dow Chemical Dowex PSR2 Plus is a strong base anion exchange resin that was initially developed for the removal of perchlorate from potable water. This resin has been shown to be effective for PFAS removal.
- ResinTech SIR-110-HP is a is a PFAS, nitrate, and perchlorate selective strong base anion resin that is less affected by sulfate ions. ResinTech’s product testing has shown effective removal of PFOA, PFOS, as well as many other PFAS compounds.
- Resinex PFCR-2 is a strongly basic gel-type anion exchange resin, specifically developed for selective PFAS removal from potable water in the presence of high concentrations of sulfate.

Provider	Product Name	Description
Purolite	Purofine® PFA694E (PFA694E)	PFAS selective single-use IX resin
Dupont	PSR2 Plus	Perchlorate selective single-use IX resin
ResinTech	SIR-110-HP	PFAS selective single-use IX resin
Resinex	PFCR-2	PFAS selective single-use IX resin

The pilot test equipment was not NSF compliant – the NSF compliance was not necessary during pilot testing because the water was discharged under the facility National Pollution Discharge Elimination System permit and was not reintroduced into the water supply after treatment. The GAC and IX resins used are NSF 61 compliant.

## 2.4 System Design

The pilot test was designed to simulate full-scale operating conditions of the GAC columns with an empty bed contact time (EBCT) of approximately 10 minutes, consistent with manufacturer’s recommendations. For the IX columns, a slightly accelerated flow rate was selected with the goal of limiting the total test duration. There was concern that the IX resin may have very long breakthrough times such that the test could not be concluded during the planned six-month duration. Therefore, a reduced resin bed volume and an increased flow rate were used to reduce the EBCT (by 50%) as well as the test duration. Furthermore, LHCWD Well #10 was selected because it contained a higher sulfate concentration than other surrounding pilot test candidate wells. This higher sulfate concentration was expected to shorten the resin life and thus shorten the test duration. It was expected that the IX resin testing would last approximately five months in total duration. As previously mentioned, another objective of the IX testing was to compare the results to the vendors’ predictive models and therefore, the selection of wells with higher concentrations of sulfate would not bias the results, performance evaluation, or life cycle costing. The GAC and IX pilot test scale and test conditions are summarized below.

**Pilot System Conditions**

Item	GAC	IX	Units
Flow Rate	0.25	0.72	gpm
Number of Trains	1	1	none
Vessel Diameter	0.33 (4)	0.25 (3)	Feet (inches)
Bed Volume	0.24	0.12	cubic feet (ft <sup>3</sup> )
Vessel Area	0.09	0.05	square feet (ft <sup>2</sup> )
Bed Depth	4.0	2.4	feet
Depth to Mid-column Sample Port	2.06	0.73	feet
Surface Loading Rate	2.9	14.7	gpm/ft <sup>2</sup>
Flow/Volume	0.7	6.0	gpm/ft <sup>3</sup>
EBCT	10.2	1.2	minutes
Approximate Treated Volume per Day	360	1,037	gallons

## 3.0 FIELDWORK, SAMPLING, AND ANALYSIS

In this section, the details of the test skid installation and startup are presented, including details of various challenges that occurred at startup. Following this, details of the well water and treated water monitoring, sampling, and laboratory analyses are provided. The treatment system monitoring, tuning, adjustments, and other pilot test maintenance is reviewed. Finally, a discussion of the pilot test duration is presented.

### 3.1 Test Skid Installation and Startup

The pilot test skid was fabricated by AqueoUS Vets® in their Redding, California plant. **Figure 3** is a piping and instrumentation diagram for the test skid, showing the location of the sediment filter, water distribution and collection manifolds, flow control valves, sampling ports,

flowmeters, and flow totalizer. Prior to transport, AqueoUS Vets® sourced and filled three of the GAC columns and three of the IX columns to the specified design heights in their Redding facility. The skid was transported to the LHHCW Well #10 site on April 17, 2020, where it was offloaded, set in its final location, leveled, and secured (refer to **Appendix B** Photolog, Photo 1).

Once the test skid was on site, the fourth GAC column was filled with Calgon F400 GAC and the fourth IX column was filled with SIR-110-HP resin to the specified column heights. Those two products were shipped directly to GSI for inclusion in the test.

GSI coordinated with LHHCW staff to make minor modifications to the existing well water distribution piping to allow a small flow to be diverted from the well's main supply pipe to the water treatment pilot test skid. The LHHCW staff also assisted with the required plumbing to direct the treated water (test skid discharge) to be conveyed to the water discharge location.

On April 21, 2020, GSI and AqueoUS Vets® filled the columns with well water to soak the GAC and IX beds and remove air. The media was left to soak overnight. The skid was covered with fabric and opaque polyethylene sheeting to reduce light exposure and protect the instruments.

On April 22, 2020, GSI and AqueoUS Vets® backflushed the GAC columns. This was accomplished by isolating the IX columns (closing the valves above the IX columns) and gently flowing well water up through the GAC columns, suspending the GAC beds and removing fines from the media. This flushing was conducted intermittently until no more fines were observed to be flowing out of the sample ports for the columns. Backflush of the F400 media was not attempted because any upflow caused the F400 media to rise to the top of the column. During this operation, some of the GAC particles floated within the columns and flowed out of the columns. After completing the flushing, the carbon bed height in the AV1240PFAS column AV1240PFAS appeared to have been reduced and was thought to have lost some carbon during the flushing. Additional AV1240PFAS GAC was added to AV1240PFAS column to meet the column height design criterion and equalize the GAC column heights. Ultimately, all the GAC columns were at uniform height at the completion of this startup effort.

On April 24, 2020, GSI returned to the site for system startup (refer to **Appendix B** Photolog, Photo 2). The flow rates were adjusted to the design flow rate and flow and pressure parameters were documented on a site visit checklist and log. This checklist/log was used by GSI and the LHHCW staff to ensure consistent data collection. Initial baseline samples were collected on this date.

### 3.2 Test Skid Monitoring, Sampling, and Analysis

GSI visited the LHHCW Well #10 site weekly for monitoring and water sample collection for approximately the first six months of operation. Due to the very slow PFAS breakthrough across the test columns, the monitoring/sampling interval was extended to once every two weeks starting October 22, 2020. Similarly, the monitoring/sampling interval was switched to once every three weeks starting December 17, 2020, and ultimately monthly starting January 27, 2021. Throughout the pilot test, the monitoring/sampling schedule was also adjusted slightly depending on well shutdown periods. **Table 1** includes a summary of sample collection dates and sample analyses. LHHCW staff visited the pilot test sites daily to verify operation and briefly document the system parameters.

During each of the weekly facility visits from system startup through September 17, 2020, GSI collected one influent sample of the untreated water and either an effluent or "midpoint" sample from each of the eight treatment columns. Water samples within the columns were collected at

approximately half of the bed volume for GAC columns and one third of the bed volume for IX columns and are referred to as “midpoint” samples throughout the remainder of this report. Samples were collected at each sampling port using the following sampling procedure:

- Nitrile gloves were donned. No waterproof clothing or boots were worn during sampling.
- Sample ports were purged for several seconds to remove stagnant water.
- Laboratory-provided sample bottles with Trizma preservative were slowly filled.
- Sample bottles were placed in laboratory-provided zip-loc bags and then into an iced cooler. The wet ice was also placed in zip-loc bags prior to placement into the coolers to prevent liquid contact with the sample bags.
- Samples were transported to a California Environmental Laboratory Accreditation Program certified laboratory, Eurofins Eaton Analytical in Monrovia, California under chain-of-custody procedures.

At the start of the test, an initial influent sample was analyzed for the parameters listed below, providing initial baseline water quality. To detect changes to the LHHCWD Well #10 water quality over the entire test duration, influent samples were also collected monthly and analyzed for this same full analyte list (see table below). The list of analytes for the more frequent influent, effluent, and QC sampling is also provided below. At the request of DDW (DDW/WRD meeting on July 8, 2020), additional sampling and analysis was conducted for bacteria during the pilot study. The laboratory reports are provided in **Appendix C**.

**Baseline Water Quality Parameters  
 (collected monthly)**

Analyte	Analytical Method
PFAS	United States Environmental Protection Agency (EPA) 537.1
Sulfate	EPA 300.0
Nitrate	EPA 300.0
Alkalinity	SM 2320B
Chloride	EPA 300.0
Uranium	EPA 200.8
Perchlorate	EPA 314.0
Total Arsenic	EPA 200.8
Hexavalent Chromium	EPA 218.6
Total Iron	EPA 200.7
Total Manganese	EPA 200.8
Total Sodium	EPA 200.7
Total Potassium	EPA 200.7
Total Calcium	EPA 200.7
Total Magnesium	EPA 200.7

Analyte	Analytical Method
pH	Field Meter
Oxidation-Reduction Potential	Field Meter
Total Dissolved Solids	E160.1 / SM 2540C
Total Suspended Solids	SM 2540D
Oil & Grease	EPA 1664
Total Organic Carbon	SM 5310C
Volatile Organic Compounds (VOCs)	EPA 524.2

**Influent, Effluent, and Quality Control Analytical Parameters  
 (collected on specified intervals)**

Analyte	Analytical Method
PFAS	EPA 537.1
Sulfate	EPA 300.0
Nitrate	EPA 300.0
Alkalinity	SM 2320B
Chloride	EPA 300.0
pH	Field Meter
Dissolved Organic Carbon	SM 5310C
Total Organic Carbon	SM 5310C

**3.2.1 Field Quality Control**

Water sample duplicates for PFAS influent samples were collected periodically for field quality control purposes. As a cost saving measure, the collection and analysis of these field duplicates was discontinued approximately three months after test startup because the first three months' results met the quality objectives. The field duplicates had demonstrated consistently acceptable relative percent differences between the primary and duplicate samples.

Field blanks for PFAS were also collected using laboratory-supplied water to confirm that field sampling procedures and laboratory analysis procedures did not introduce sources of contamination. After collection of twelve field blanks over approximately three months, collection and analysis of field blanks was discontinued due to no detections observed in any field blank samples.

**3.3 Inspections, Tuning, Maintenance and Troubleshooting**

During implementation of the pilot test, frequent inspections, tuning, maintenance, and troubleshooting were conducted to ensure effective operation of the test skid. These items included routine flowrate adjustments, filter changes, cleaning and prevention measures for algae growth, and pilot system maintenance during prolonged shutdowns.

### 3.3.1 Routine Flowrate Adjustments

During each facility visit, flowrates through each column were recorded. Direct read flowmeters (rotameters) were installed on each column so that the flowrate could be adjusted and tuned. If flowrates were not within 0.05 gpm of the design rate through GAC columns or 0.1 gpm of the design rate through IX columns, then flows were adjusted using the flow control valves underneath each column.

The total flow volume was initially calculated using two different readings: one using an electronic totalizer/flowmeter installed on one of four columns (one on the GAC side and one on the IX side) and the other using a mechanical flowmeter (rotameter) installed on each column and multiplying the observed flow rate by the incremental run time between readings. Following the first month of operation, it was determined that using the readings from a flowmeter installed on each individual column was a more dependable method for total flow volume calculation. The electronic totalizer/flowmeters were observed to report a lower totalized flow than the computed total flow using the mechanical flowmeters. The electronic totalizer/flowmeters were disassembled and cleaned but the flow volume disparity was not mitigated. Later, it was determined that resetting the totalizer/flowmeters every week would improve the discrepancy between two different total flow measurement methods.

### 3.3.2 Filter Replacement

The 10-inch x 4.5-inch, 5-micron sediment cartridge filter on the inlet side of the pilot skid was first replaced on June 23, 2020, approximately two months after system start-up. During this first replacement, a heavy sediment build-up was observed on the cartridge filter. Cartridge filter replacement was subsequently placed on a monthly schedule for the duration of pilot test to prevent heavy buildup of sediment and subsequent delivery pressure degradation.

### 3.3.3 Algae Growth

On June 9, 2020, possible algae growth (spotty discoloration) was observed on a small, localized portion of the PFA694E ion exchange resin column even though the pilot test skid was covered with the plastic and fabric sheets (refer to **Appendix B** Photolog, Photo 3). To address this, an additional sunlight protection measure was implemented: the GAC and IX media columns were covered with aluminum foil to block the light and prevent algae growth. Approximately once per month, the aluminum foil was removed to check for the presence of algae in GAC or IX columns and to document the color of IX resin. Following these inspections, the aluminum foil was reapplied to each column (refer to **Appendix B** Photolog, Photo 4). No additional growth of the suspected algae was observed in the PFA694E column throughout the remainder of the pilot test.

On June 16, 2020, algae growth was first observed in the AV1240PFAS GAC mechanical flowmeter (refer to **Appendix B** Photolog, Photo 5). For the pilot test duration, whenever additional algae growth was observed, each of the flowmeters was disassembled and cleaned using a soft brush. The flow meters were also covered with aluminum foil to prevent light penetration. On June 23, 2020, the algae spot previously observed on the PFA694E column was observed to have decreased in size and turned black. The aluminum foil wrap likely caused this algae spot to die. On August 6, 2020, the flowmeters were covered with blackout fabric for greater protection from light. The fabric was successful in preventing additional algae growth in the flowmeters for the duration of the pilot test. On September 3, 2020, some suspected algae growth was observed on the wall of the AV1240 column, but growth was not observed on or in the media. Two small algae spots were observed on October 15, 2020 in the SIR-110-HP column; one spot was above the media and the other was between the media and column wall.



Although small growths of algae were observed during pilot test, it was not considered to have an impact on the pilot test results. The observed algae occurred in small, localized films and was not observed to be growing within the media, but solely at the interface between the media the plastic column walls.

### 3.4 Well Shutdowns and Variable Pressures

The inlet pressure to the pilot skid was observed to increase by approximately 10 psi when both LHCWD Well #10 and neighboring LHCWD Well #11 were pumped simultaneously due to the increased head pressure in the water well conveyance piping. Although the pilot skid contained a pressure regulator, the flow rates still varied depending on whether LHCWD Well #11 was operating. As a result, LHCWD provided GSI the operating schedules for LHCWD Wells #10 and #11 for the duration of the pilot. The operating schedules were used to help calculate the volumes of water treated by the pilot test columns by using the recorded flowrates for each pumping scenario between flowrate adjustment periods.

Frequent shutdowns of LHCWD Well #10 presented difficulties in providing consistent flow to the pilot skid. Because of the presence of a check valve in the LHCWD Well #10 conveyance piping, other wells were prevented from supplying water to the pilot skid. Therefore, when LHCWD Well #10 stopped pumping, flow and pressure in the pilot skid dropped to zero. A vacuum break and check valve on the pilot skid prevented drainage of the columns. For the duration of the pilot test, LHCWD Well #10 was pumped for about 86% of the time, not including a planned one-week shutdown for routine maintenance in late June 2020.

#### 3.4.1 Auxiliary Pumping

On May 5, 2020, it was determined that the design flowrates could not be reliably achieved when LHCWD Wells #10 and #11 were not simultaneously operating due to insufficient water pressure from LHCWD Well #10. To increase the feed pressure while not relying on LHCWD Well #11, a booster pump was installed on the inlet line on June 9, 2020. In addition, a low-pressure, suction-side pressure regulator was installed on the booster pump inlet to regulate the variable inlet pressure. The booster pump accepted the low-pressure water stream and provided an additional 40 psi of pressure to the test skid. This setup succeeded in providing the needed pressure to maintain consistent flowrates to the test skid.

The booster pump was shut down on October 1, 2020 after exhibiting signs of pump stress (overheating, loud noise). Inspection of the pump suggested that sand may have caused the failure due to impeller wear. A new booster pump was installed on October 8, 2020. The new booster pump was outfitted with a suction-side, 50-micron sediment filter to remove sand at the booster pump inlet. The sediment filter was purged daily and cleaned weekly. On October 29, 2020, a coarser 200-micron sediment filter replaced the 50-micron filter to increase the pressure on the booster pump inlet. On December 13, 2020, the booster pump was again shut down due to irregular pump noise and vibration. It was thought that a combination of frequent well stops and starts, reduced inlet pressure due to the suction side filter and small diameter feed hose, and the presence of the suction-side pressure regulator contributed to an unacceptable feed pressure that lead to pump failure. A new booster pump was installed on December 31, 2020 that eliminated the use of a sediment filter and pressure regulator. A hose timer was also added to the discharge side of the pump to periodically purge water to remove sand and air accumulation and reduce cavitation. This pump continued to run until the completion of the pilot study. Refer to **Figure 3** (piping and instrumentation diagram) for details on the plumbing layout.

### **3.5 Pilot Test Duration**

Key performance measurements for the pilot test were influent and effluent PFAS concentrations (with a primary focus on PFOA and PFOS) and time to breakthrough (on a bed volume basis) for each PFAS analyte. The initial planned duration of the pilot test was 26 weeks. The objective was to run the test until the PFOA or PFOS concentration achieved 50% breakthrough (treated concentration divided by initial concentration or  $C/C_0$ ) or until the PFOA or PFOS concentration reached their respective RLs.

However, after approximately six months of operation, the GAC and IX media performed very well and the PFOA and PFOS breakthrough was insufficient to meet these objectives. Due to the extended time for PFAS breakthrough for several of the media and to obtain some early insight as to how the media was performing, it was decided that midpoint (mid-column) samples would be collected on a monthly basis beginning June 30, 2020. Note that for the GAC, this sample port was located approximately in the middle of the column while on the IX columns, this sample port was located approximately one-third down the column length, representing approximately 33% of the column length. The results from the midpoint samples provided information on the rate of PFAS breakthrough within each column so that the overall duration of the pilot test could be better estimated, and the water sampling schedule could be appropriately modified for increased cost efficiency.

In coordination with WRD, the pilot test was ultimately extended to April 22, 2021, a total of approximately 12 months. During this time, approximately 48,000 bed volumes were treated through each of the GAC columns and approximately 450,000 bed volumes were treated through each of the IX columns.

### **4.0 PILOT TEST RESULTS**

In this section, the pilot test field observations, the influent chemistry, the GAC and IX removal performance for PFOA and PFOS, the removal performance for other PFAS, and finally, data validation and usability are addressed.

#### **4.1 Pilot Test Field Observations**

The well delivery pressures for LHHCW Well #10 were variable throughout the pilot test, mostly dependent on whether LHHCW Well #11 was running simultaneously with LHHCW Well #10. Well delivery pressures generally varied from about 12 to 30 psi. The operating schedule for LHHCW Well #10 was also variable. This is important because the test skid flow to each test column was adjusted by control valves that restrict flow. On average, the well ran for about 86% of the time throughout the pilot test, but there were periods of extended consistent operation (99.3% runtime during the first two weeks of April, for example) and intermittent operation. The variable skid inlet pressures and well operation schedule led to difficulties in setting and maintaining a consistent delivery flowrate to each column. The low pressures also did not allow for the design flowrates to be achieved without the use of auxiliary pumping. The addition of a booster pump improved the ability to maintain consistent flowrates through the test skid.

LHHCW Well #10 water contained some fine sand that necessitated monthly cartridge filter replacement on the pilot skid inlet. In addition, algae growth was observed in the media intermittently throughout the pilot test. The presence of algae was likely exacerbated by intermittent flow and resulting occasional stagnant water in the test columns.

The GAC and IX resin bed heights did not change throughout the pilot test, indicating that little settling of the media occurred after the system startup and a consistent bed volume was maintained.

## 4.2 Influent PFAS and Background Chemistry

Influent PFAS and background chemistry constituents were measured on a weekly and/or monthly basis during the pilot study. The following table summarizes the concentration ranges of PFAS in LHCWD Well #10 untreated water.

**LHCWD Well #10 Untreated Water PFAS Concentration Summary**

Compound		Untreated Water Concentration (ng/L)		
		Min.	Max.	Avg.
Full name	Abbreviation			
Perfluorooctanoic acid	PFOA	11	17	12.33
Perfluorooctanesulfonic acid	PFOS	29	37	31.44
Perfluorohexanesulfonic acid	PFHxS	5.88	7.33	6.33
Perfluorobutanesulfonic acid	PFBS	5.33	7.22	6.22
Perfluorohexanoic acid	PFHxA	2.5	7.88	3.44
Perfluoroheptanoic acid	PFHpA	<2.0	2.9	0.33
Perfluorononanoic acid	PFNA	2.7	3.4	3.00

### Notes

For PFAS with non-detect results, 0 was substituted for the calculation of the average concentration.

The water background chemistry established with the baseline water quality sampling was stable throughout the pilot test duration. The key background chemistry parameters that were measured routinely included:

- Nitrate (as nitrate), which varied between 12 and 13 mg/L;
- Sulfate, which varied between 160 to 180 mg/L; and
- TOC, which varied between 0.6 to 1.6 mg/L.

Dissolved organic carbon (DOC) measurement began in 2021 with influent DOC concentrations varying between 0.6 and 1.2 mg/L. The full set of these data are presented in **Table 2**.

Additional background chemistry parameters were monitored on a monthly basis during the pilot study. Out of these parameters that were monitored monthly, some influent characteristics are listed below:

- The water had elevated total hardness that was consistently above 300 mg/L as CaCO<sub>3</sub>;
- Iron concentrations were below detection (<0.020 mg/L) except for the first pilot test sampling event;
- VOCs as measured by EPA Method 524.2 were detected at very low concentrations during the pilot test (maximum detections of 2-butanone, chloroform, and total trihalomethanes were 5.8, 0.81, and 0.81 µg/L, respectively); and
- Concentrations of oil & grease (hexane extractable material) were measured during the pilot test ranging from non-detect (<0.95 mg/L) to 3.52 mg/L.

The full set of these data are presented in **Table 3**.

## 4.3 PFOA and PFOS Removal Performance

GAC and IX resin breakthrough curves for PFOA and PFOS are presented in **Figures 4 and 5** and **Figures 6 and 7**, respectively. The breakthrough curve plots show the effluent concentration

of either PFOA or PFOS in ng/L on the primary y-axis as a function of the bed volumes treated on the primary x-axis. A blue line represents the volume of water treated, which is shown on the secondary y-axis. A secondary x-axis shows the operational time equivalent to bed volumes treated in months.

A recent report by Jacobs Engineering Group, Inc. (Jacobs), in partnership with Orange County Water District (OCWD), suggests that selecting 60% of the influent concentration (or the analyte RL, whichever is lower) as the lead vessel changeout criterion is more optimal and economical than the more typically used 50% (Jacobs, 2021). To allow for comparison with that study, in addition to the RL, the data from the current pilot study are also discussed using the additional breakthrough criterion of 60% of the influent concentration (7.4 ng/L for PFOA and 18.8 ng/L for PFOS).

Over the course of the pilot study, PFOS concentrations did not exceed the RL of 40 ng/L or 60% of the influent concentration in the effluent or midpoint samples for any of the GAC or IX columns (**Figures 5 and 7**). Therefore, in all cases, the effluent PFOA concentration controls the timing of GAC or IX media changeout.

Due to better than anticipated performance, PFAS had not broken through many of the GAC media by the completion of the pilot test and many of IX media broke through but did not reach the RL. To address this and assist WRD and the pumpers at LHHCWD with decisions regarding choice of adsorbent media for PFAS removal, breakthrough curves for PFOA were linearly extrapolated to the RL when necessary (**Figures 8 and 9**). This method of bed life estimation provides an additional level of conservatism because the breakthrough curve slope should become shallower as it approaches the influent concentration. This means that a linear extrapolation of the breakthrough curve would intercept the RL in fewer bed volumes than the actual curve, if the pilot were allowed to operate to complete breakthrough.

Because none of the GAC columns were operated long enough to observe appreciable PFOA in effluent samples, midpoint samples were used to help estimate GAC bed life (**Figure 8**). These bed lives were multiplied by a factor of 1.5 to approximate what the bed life of the full bed would be. This approach is in part based on the empirical relationship between the midpoint and the full bed volume bed lives for the GACs that were observed at the Montebello Land and Water Company Water Supply Well #7 pilot test (GSI, 2021). The full bed lives for the GACs at the MTBLW were approximately 1.5 to 2 times larger than those determined for the column midpoints, which suggests that using a scale-up factor of 1.5 is both reasonable and somewhat conservative. Because there is no reliable way to scale up observed bed life when the bed volume is doubled, the GAC bed life estimates presented in this report should not be considered perfect representations of the GAC PFAS removal performance at LHHCWD Well #10.

Linear extrapolation was also used to estimate bed lives for three of the IX resins using incomplete breakthrough curves.

A summary of the time for PFOA to breakthrough GAC and IX is presented in the below table in bed volumes.

**LHCWD Well #10 Breakthrough Summary**

Media	Estimated Breakthrough Time for PFOA in Bed Volumes	
	RL	60% of Influent Concentration
<b>Granular Activated Carbon</b>		
F400	94,500*	84,000*
AV1240LDX	72,000 <sup>72</sup> **	67,500**
AV1240CB	67,500**	54,000**
AV1240PFAS	67,500**	51,000**
<b>Ion Exchange Resin</b>		
PSR2 Plus	670,000***	540,000***
SIR-110-HP	510,000***	450,000***
PFCR-2	490,000***	440,000***
PFA694E	400,000	360,000

**Notes**

All breakthrough times were determined by linear interpolation of effluent concentrations unless otherwise noted.

\* Breakthrough time was estimated by linearly extrapolation of incomplete midpoint “breakthrough” curve. This value was then increased by a factor of 1.5 to approximate the breakthrough time for the full bed volume.

\*\* Breakthrough times were estimated by increasing the midpoint “breakthrough” time by a factor of 1.5 to approximate the breakthrough time for the full bed volume.

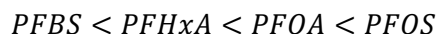
\*\*\* Breakthrough time was linearly extrapolated from incomplete full bed volume breakthrough curves out to the RL or 60% criteria.

Overall, the F400 and PSR2 Plus appear to have the longest bed lives of all GACs and IX resins tested, respectively.

**4.4 Removal of Other PFAS**

The order of 100% breakthrough for PFAS generally followed chain length within the perfluorocarboxylic acid and perfluorosulfonic acid groups for both GAC and IX, with shorter chain PFAS breaking through first. Breakthrough order was determined based on a number of factors including midpoint sampling, effluent sampling, and observations from the MTBLW pilot study that were used to estimate time to breakthrough for PFOA.

For GAC columns, PFAS breakthrough (100%) order generally followed the order for most media:



The placement of PFHxS in the ordering could not be confirmed because elevated concentrations were only detected in midpoint columns. PFHpA and PFNA were also not included in the breakthrough time ordering due to the fact that for the duration of the pilot study, most almost all influent samples were below detection for PFHpA and all effluent samples were non-detect for PFNA. The F400 GAC tended to retain PFBS, PFHxA, and PFOA better than the other three activated carbons. Perfluorosulfonic acids typically broke through the activated carbon columns later than the perfluorocarboxylic acids with the exception of PFBS.

For IX columns, PFAS breakthrough (100%) order was less clear. PFHxA generally reached 100% breakthrough early than anticipated for PFOA. With respect to the perfluorosulfonic acids, they were better retained than PFHxA and PFOA, however their exact breakthrough order could not be confirmed by the pilot test data. PFHpA and PFNA were again not included in breakthrough

order consideration for the same reasons previously presented for the GAC columns. The IX columns retained perfluorosulfonic acids, including the short-chain PFBS, considerably better than GAC relative to perfluorocarboxylic acids.

Breakthrough curves for other PFAS are presented in **Appendix D**. Midpoint and effluent concentrations are presented in **Table 4** for GAC columns and **Table 5** for IX columns.

#### 4.5 Bacterial Testing

Influent and effluent water from the pilot test skid was analyzed for fecal indicator bacteria including *E. coli* and total coliforms to ensure bacteria were not colonizing on the media columns. Neither *E. coli* nor total coliforms were present in influent or effluent samples measured four months after the start of the test (August 30, 2020). The results of this sampling are presented in **Table 6**.

#### 4.6 Data Validation

All PFAS analytical results were evaluated and validated using the *Data Review and Validation Guidelines for Perfluoroalkyl Substances (PFASs) Analyzed Using EPA Method 537* published by the United States EPA in November 2018. Nearly all samples met the criteria for PFAS analyses contained within this document and no results were qualified except for several results for the influent sample from May 19, 2020. Due to the anomalously low values within this set of data compared with the larger data set, these data were excluded from plots and calculations.

The results of all other inorganic and organic analyses conducted during this study were evaluated and validated using the *National Functional Guidelines for Inorganic Superfund Method Data Review* and the *National Functional Guidelines for Organic Superfund Methods Data Review*. During this process, several influent sample results were qualified. Results for alkalinity and total suspended solids samples collected on March 21, 2021 were qualified for being analyzed outside of holding times. The result for a total arsenic sample collected on March 21, 2021 was qualified due to detection of the analyte in the method blank. Neither of these data qualifications affected the usability of the data. A complete description of the data validation and usability assessment is presented in **Appendix E**.

## 5.0 DATA EVALUATION AND DISCUSSION

In this section, the data generated during the pilot testing is discussed in the context of similar pilot tests and studies that have also examined PFAS removal from by GAC and IX with the primary discussion topics including overall pilot system PFAS removal performance, how contact time may affect bed life estimates, GAC and IX removal performance, and competing ions.

### 5.1 Pilot System Operation

There were no significant operational differences between the GAC and IX pilot system column operations. No media type appeared distinctly susceptible to significant algae growth or other biofouling.

### 5.2 PFAS Pilot System Removal Performance

Due to better than anticipated PFAS removal performance by the tested media, an optimal performing media, with respect to PFOA adsorption capacity, could not be confirmed for LHHCW Well #10. However, using midpoint sample results, overall PFAS removal behavior, and breakthrough curve behavior, better performing media were identified.

Because of the differences in the RLs between PFOA and PFOS, and their relative concentrations in the LHHCW Well #10 water, PFOA is the primary driver for media changeout. Typical influent concentrations for PFOA ranged between 11 and 17 ng/L at this site, which puts the water above the 10 ng/L RL. PFOS concentrations in the influent were below its RL of 40 ng/L for the duration of the test. The choice of using the RL as the media changeout trigger as opposed to a different threshold (e.g., NL or 60% of influent concentration) was made based on discussions with treatment system vendors and the results of the lead-lag performance modeling conducted by Jacobs as part of the OCWD PFAS Treatment Testing Study. Using the performance modeling results presented in the Jacobs' report, the concentration in the lag vessel effluent was predicted to be non-detect (<2 ng/L) when using a changeout target of 60% of the influent concentration, which was higher than the PFOA RL (11.1 ng/L) (Jacobs, 2021). Their model results show that the effluent concentration of PFOA in the lag vessel was non-detect through the point at which the lead vessel effluent reached the PFOA RL. Because LHHCW Well #10 had lower PFOA concentrations than those in the OCWD pilot test in addition to the results of the Jacobs lead-lag model, using the RL as a changeout trigger for LHHCW Well #10 is anticipated to be sufficiently protective to prevent lag vessel breakthrough above the current PFOA detection limit of 2 ng/L.

As previously mentioned, one of the limitations of this study was the inability to observe PFOA and PFOS at the respective RL in the column effluents for many of the tested media. To overcome this, linear extrapolation of the breakthrough curves was used to predict bed life using the PFOA RL criterion. This is a conservative approach because breakthrough curves typically will asymptotically approach the influent concentration. By using straight line extrapolation, the bed life that is estimated is most likely lower than what would have been observed.

### 5.3 Contact Time

Because of the need to limit the duration of the test for budgetary reasons, the EBCT of the IX columns was reduced from the manufacturer recommended 2.5 minutes down to 1.2 minutes. Additionally, the breakthrough curve information for the GAC columns is effectively for a halved EBCT because elevated PFOA concentrations were only detected in midpoint samples. The GAC midpoint sample results were used to estimate bed lives for the full bed volume by multiplying the bed lives for midpoint samples at the PFOA RL by a factor of 1.5. It is expected that generally increasing EBCT causes improved removal performance due to longer contact time between the

media and the contaminated water. Results from a companion pilot study conducted at MTBLW Well #7 that used the same GAC products show that generally the full bed volume bed lives were about 1.5 to 2 times greater than determined using midpoint samples (GSI, 2021). This supports using a factor of 1.5 to reasonably estimate full bed volume bed lives for the GACs while retaining a level of conservatism.

While reasonable, this method does have some limitations, notably the potential for short circuiting and competition effects with other source water constituents. Because these columns are relatively small in scale, there is the potential that water would find preferential flow paths and therefore the observed bed volumes for midpoint sample breakthrough may not accurately represent a larger system. Based on our experience with smaller-scale pilot and laboratory columns, these preferential flow paths that would cause short circuiting are more likely to develop between the media and the column wall. While no such flow paths were observed along the column walls, it is possible that they could have developed inside the column beds. With respect to competition effects, longer EBCTs can potentially reduce removal performance for target contaminants via preloading with other constituents, such as natural organic matter (NOM), that travel through the bed faster. Park et al. (2020) noted that while previous studies have found NOM to interfere with PFAS adsorption in this manner, they did not observe the phenomenon in their column studies. They hypothesize that the DOC in their experiments did not cause increasing PFAS adsorption interference at longer EBCTs due to the DOC being overall more hydrophobic. Without a more detailed analysis of the TOC composition, it is difficult to determine if longer EBCTs would have this effect on GAC adsorption of PFAS at LHHCWD Well #10.

The pilot results showed improved PFOA bed capacity for all media tested compared with those reported by OCWD; however, it is unclear how much of that is attributable to influent water chemistry or contact time. To truly optimize a GAC treatment system using one of the media tested in this study, additional pilot testing for a longer duration would be required. In terms of the life cycle costs developed in Section 6, sensitivity analysis was used to determine how sensitive life cycle costs would be to perturbations in the estimated bed lives.

#### **5.4 Granular Activated Carbon Performance**

Of the four tested activated carbons, the Calgon F400 lasted the longest in terms of time to breakthrough at the RL of 10 ng/L.

PFOA was detected in GAC column midpoint samples earlier than PFOS, despite having a lower loading concentration in the influent water. This indicates that PFOS has a higher affinity for the GAC adsorption than PFOA.

While the effects of TOC and DOC in source water were not quantified during this study, it is anticipated that the presence of approximately 1 mg/L of TOC/DOC in the source water likely impacted removal of PFAS by GAC. GAC has been used for decades as a unit process to remove total and dissolved organic carbon from drinking water to improve characteristics such as odor and taste. Because the concentrations of TOC/DOC and PFAS in the source water differ considerably (approximately 100,000 times more TOC/DOC than PFAS), it is to be expected that some of GAC adsorption capacity would be taken up by organic carbon which would reduce the total mass of PFAS that could be removed. Higher TOC/DOC concentrations would likely reduce the bed lives of the GACs that were observed during the pilot test while lower concentrations would likely have the opposite effect. As previously mentioned, it is not simply the presence of TOC/DOC that impacts PFAS removal by GAC, but characteristics of the organic carbon, especially hydrophobicity. The pilot test conducted by GSI at MTBLW Well #7 had similar concentrations of TOC and DOC, however there was measurable PFOA in effluent samples collected during the testing, whereas there was only measurable PFOA in the effluent of one of



the GAC columns at LHCWD Well #10 at month 12 of the test (GSI, 2021). This suggests the possibility that the TOC measured at MTBLW Well #7 had characteristics causing reduced PFOA removal capacity that the water from LHCWD Well #10 lacked.

When considering the suite of PFAS that were measured using EPA Method 537.1, removal capacity of PFAS by the GAC products tended to follow the same observed patterns that have been observed in other studies (Liu et al., 2019):

- The perfluorocarboxylic acids typically broke through before the perfluorosulfonic acids; and
- Within each type, GAC tended to retain longer-chain PFAS better than shorter-chain PFAS.

Chromatographic peaking, a phenomenon where effluent concentrations from a fixed-bed adsorption reactor exceed the influent concentrations, was only observed for PFBS in effluent samples from the GAC columns. This suggests that PFBS is desorbing from the GACs and being replaced with other compounds that have higher affinities for adsorption than PFBS, such as longer chain PFAS or other water constituents (e.g., DOC). Because of the limited duration of the pilot study, it is unclear whether other PFAS compounds, such as PFOA, would also exhibit this type of behavior with the GAC products.

## 5.5 Ion Exchange Resin Performance

Test skid effluent PFOA concentrations exceeded the RL for only one of the tested IX resins, PSA694E. While not confirmed by this pilot study, based on early breakthrough curve behavior, the PSR2 Plus IX resin appears to have the largest PFOA removal capacity of the four IX resins. PSR2 Plus was also found to have the largest PFOA removal capacity based on the results of pilot test conducted at MTBLW Well #7 (GSI, 2021). A longer duration would be needed to confirm which IX resin ultimately has the best PFOA removal performance for LHCWD Well #10.

### 5.5.1 Competing Ions

Elevated sulfate concentrations had a lesser impact on PFAS removal by the IX resins than anticipated. LHCWD Well #10 was chosen in part due to relatively high sulfate loadings of 160 to 180 mg/L, which were anticipated to shorten the pilot duration and provide data to reflect a “worst case scenario” in terms of competing ions. While effluent samples from this study were not analyzed for general water quality constituents, other studies have considered the potential for competition between PFAS and inorganic ions for adsorption on IX resin. During the OCWD pilot, PSR2 Plus did not significantly remove sulfate at similar influent concentrations to those found in the current study (about 2% of influent sulfate mass) (Jacobs, 2021). However, not all IX resins behaved this way. The investigators also observed that ECT2 SORBIX IC4 and Purolite PFA694E (also used in the current study) significantly removed sulfate initially during the pilot test (approximately 27% and 17% of influent sulfate mass, respectively) (Jacobs, 2021). Based on these observations, it is unlikely that sulfate impacted PFAS removal performance by PSR2 Plus but suggests that it likely affected PFA694E performance, which had the most rapid PFOA breakthrough.

The source water for this pilot test also contained nitrate in the range of 12 to 13 mg/L as nitrate. The OCWD pilot study source water contained lower levels of nitrate (2.21 mg/L), and found that all tested IX resins, including PSR2 Plus, removed nitrate to treated water concentrations of approximately 0.05 mg/L at the start of the study (Jacobs, 2021). The presence of nitrate in the source water for the current study may have reduced IX resin capacity for PFAS and consequently reduced the time to breakthrough, however nitrate impacts on IX performance were not confirmed.

The observations from the OCWD pilot study coupled with the results of this study and suggest that PSR2 Plus can remove PFAS even in the presence of elevated sulfate concentrations and confirms the importance of considering the potential effects of competing anions on the performance of IX resins when evaluating treatment alternatives as some resins may have been impacted by competing ions.

### **5.5.2 Comparison of Pilot Results with Vendor Models**

The results generated by this study were deemed too incomplete due to insufficient test time for meaningful comparison with vendor IX breakthrough models.

## **6.0 LIFE CYCLE COST ANALYSIS**

Life cycle cost analysis (LCCA) for the GAC and IX alternatives was conducted to provide information on the cost-effectiveness of the tested GAC and IX media. Life cycle costs include both annual O&M costs and initial capital costs to purchase and construct the treatment systems. Capital costs include the treatment trains, initial media fill, and installation fees (Equipment and Installation Capital Costs) but does not include site-specific work such as site work, yard piping, foundations, additional process equipment (prefiltration, backwash tank, etc.), total installation costs for site, electrical, instrumentation & control, general conditions, overhead, contractor profit, bonds and insurance, engineering and permitting, and contingency. Capital costs are presented as 2021 costs and are not escalated. O&M costs consist of media changeouts, including both the cost of new media and disposal of spent media, and annual pumping costs (increase in electricity cost) in excess of baseline that are associated with differential head loss between GAC and IX systems. Cash flows were developed that included O&M costs at the end of the year in which they were incurred. We applied a 5% discount rate and a 3% inflation rate and assumed a 20-year operational period. For comparison, the cash flows for each treatment approach are shown as net present value (NPV) costs. Using this approach, we can compare all tested media. Detailed discussion was only provided for the two most cost-effective GACs (F400 and AV1240LDX) and the two most cost-effective IX resins (PSR2 Plus and PFCR-2). Additional assumptions used in the analysis are presented in the following section.

### **6.1 Assumptions**

The following assumptions and included rationale were used to develop the cost estimates:

1. The alternatives were evaluated over a 20-year lifetime;
2. A 5% discount rate (and a 3% inflation rate was applied to the cash flow);
3. A 10% tax rate was applied to the cost of equipment and virgin media;
4. Each alternative was assumed to treat the same volume of water over the 20-year lifetime;
5. Costs were applied at the end of the year in which they were incurred with capital costs being incurred at end of year 0;
6. Treatment system vessels would be setup in a lead-lag configuration to allow for the maximum utilization of the lead vessel media prior to changeout;
7. GAC and IX media changeouts would occur at PFOA RL breakthrough in the lead vessel and not on a predetermined basis;
8. Full-scale systems would incorporate bag filter pretreatment for sediment removal, similar to that which was used during the pilot testing to remove sediment;
9. Flowrates and EBCT would conform with manufacturers' specifications in full-scale treatment systems;

10. Certain costs that were assumed to be equal between GAC and IX system alternatives were excluded from the LCCA and include site-specific work such as site work, yard piping, foundations, additional process equipment (prefiltration, etc.), total installation costs for site, electrical, instrumentation & control, general conditions, overhead, contractor profit, bonds and insurance, engineering and permitting, and contingency;
11. IX resin is assumed to require landfill disposal (incineration would increase disposal costs);
12. GAC is assumed to be reactivated by the manufacturer and returned to site for reuse;
13. Backwashing during bed operation is not vendor recommended and was not included in the analysis;
14. Freight costs for new media were included in the media unit price for the LCCA;
15. The cost of filling and emptying the media vessels was excluded due to being small in comparison with media costs; and
16. To account for differences in head loss through the pressure vessels for the GAC and IX systems, estimates of differential pumping costs (provided by AqueoUS Vets) are included in the LCCA.

### **6.1.1 Effect of Influent Water Quality on Cost Estimation**

Adsorbent media bed life will vary between different water sources depending on contaminant loading and background water chemistry. The influent source water used in the pilot testing was simultaneously distributed to each media type such that influent concentrations of all constituents were the same for all media types and are not expected to have disproportionately impacted the relative efficiencies between the different media types. General best operational practices would be to pretreat the water for total suspended solids and other interfering compounds (e.g., oil and grease) to the extent feasible prior to passing water through the GAC or IX vessels; however, this pretreatment was not included in the life cycle cost estimates. GAC is capable of treating most organic co-contaminants that may be present, with the primary impact being increased GAC consumption, which may require more frequent changeouts. Also, anions such as nitrate and sulfate can compete for ion exchange sites on the resins even though the resins are selective towards PFAS. Therefore, the influent concentrations of these will affect changeout frequency.

## 6.2 Full-Scale System Design

The below table summarizes design parameters for the full-scale GAC and IX treatment system alternatives:

**Full-Scale Conditions**

Items	GAC	IX	Units
Train Flow Rate	767	1,150	gpm
Number of Trains	3	2	none
Vessel Diameter	12	12	feet
Bed Volume	1,025	384	ft <sup>3</sup>
Vessel Cross-Sectional Area	113	113	ft <sup>2</sup>
Treatment train Footprint	380	395	ft <sup>2</sup> /train
Total Adsorption Treatment System Footprint	1,140	790	ft <sup>2</sup>
Bed Depth	8.9	4.4	feet
Surface Loading Rate	6.8	10.2	gpm/ft <sup>2</sup>
EBCT	10	2.5	minutes
Treated Volume per Day	2,160,000	2,160,000	gallons

**Notes**

Each train is comprised of two (2) 125 PSI ASME code adsorbers with interconnecting pipe and additional fittings and connectors including: two graphite rupture disks per system for pressure relief, 8-inch carbon steel ring header and 8-inch carbon steel manifold (GAC) or 10-inch carbon steel manifold (IX), nine wafer-style butterfly valves with cast iron body and nylon coated ductile iron disc, and a 316 stainless steel four-point upper distributor included in each adsorber (IX only).

## 6.3 Capital Costs

### 6.3.1 Spatial Requirements

GAC systems require lower surface loading rates and higher EBCT compared to IX systems (e.g., 10 vs 2.5 minutes). This means that in terms of treatment trains, for a given design flowrate, more GAC treatment trains are needed. Overall, this results in a treatment system footprint for GAC treatment that is typically larger than for IX treatment. For a full-scale design flowrate of 2,300 gpm the GAC and IX treatment alternatives have the following footprint requirements:

- The GAC treatment system has a footprint of 1,140 ft<sup>2</sup> (three trains are required, each with a footprint of 380 ft<sup>2</sup>); and

- The IX treatment system has a footprint of 790 ft<sup>2</sup> (two trains are required, each with a footprint of 395 ft<sup>2</sup>).

The above footprint estimates only account for the treatment train area and do not include additional space required for specific treatment system arrangements, vehicular access, and other required system components such as prefiltration or backwash facilities. GAC systems also have an overall height of approximately 19 feet compared to an approximately 16-foot IX system height, which could have implications for indoor or residential treatment areas. In crowded residential neighborhoods, space restrictions and aesthetic considerations may make a more compact, longer-running resin-based system more desirable.

### 6.3.2 Cost of Initial Media

The following media costs were considered during the life cycle cost evaluation. When evaluating carbon cost, it is important to assess the cost per ft<sup>3</sup> and not simply the price per pound (lb). Each carbon has a different apparent density. The EBCT is measured using carbon volume, not weight; however, GAC is purchased on a per pound basis. The budgetary cost per cubic foot is provided in the tables below. These unit costs include freight but do not include tax.

#### GAC Products

Media	Apparent Density (lbs/ ft <sup>3</sup> )	Cost (\$ per lb)	Cost (\$ per ft <sup>3</sup> )
AV1240	31.2	\$1.65	\$51.48
AV1240LDX	25.0	\$1.55	\$38.75
AV1240PFAS	28.7	\$1.90	\$52.82
F400	33.7	\$1.75	\$58.98

#### IX Products

Media	Apparent Density (lbs/ ft <sup>3</sup> )	Cost (\$ per lb)	Cost (\$ per ft <sup>3</sup> )
PSR2 Plus	43	\$6.40	\$275.00
SIR-110-HP	41	\$7.56	\$310.00
PFA694E	42	\$6.55	\$275.00
PFGR-2	42	\$5.60	\$235.00

### 6.3.3 Treatment System Components and Installation

Below is a summary of estimated capital costs for the two best performing GACs and IX resins that were used in this LCCA:

Item	F400 GAC	AV1240LDX GAC	PSR2 Plus IX Resin	PFCR-2 IX Resin
Train Cost (lead-lag) <sup>1</sup>	\$1,470,356	\$1,470,356	\$914,760	\$914,760
Total Initial Media Cost (unit cost)	\$598,449 <sup>2</sup> (\$58.98/ft <sup>3</sup> )	\$393,216 <sup>2</sup> (\$38.75/ft <sup>3</sup> )	\$466,400 <sup>3</sup> (\$275.00/ft <sup>3</sup> )	\$396,000 <sup>3</sup> (\$235.00/ft <sup>3</sup> )
Installation Cost	\$12,000	\$12,000	\$12,000	\$12,000
<b>Total Equipment and Installation Capital Cost<sup>4</sup></b>	<b>\$2,081,000</b>	<b>\$1,876,000</b>	<b>\$1,393,000</b>	<b>\$1,323,000</b>

**Notes**

- GAC alternatives require three trains (\$490,000/train including tax) while IX alternatives require two trains (\$457,500/train including tax).
- Includes enough GAC to fill the two vessels on each train (6 loads) to the design bed height plus “swing” loads (3 loads) of GAC to be warehoused, used for changeouts, and reactivated. Includes freight costs.
- Includes enough IX to fill the two vessels on each train to the design bed height. Includes freight costs. Costs include a 10% sales tax rate on equipment and initial media purchase.
- Rounded to nearest \$1,000.

The above does not include costs for drinking water distribution system tie-ins or other construction costs. The equipment and installation capital costs are simply costs to set the treatment equipment and make minor plumbing connections. Additionally, the above tables include three “swing” loads of GAC because the GAC is assumed to be reactivated by the manufacturer. This means the capital costs include enough GAC to initially fill all treatment vessels (six loads) to their design bed heights plus three loads of GAC that can be warehoused and used for the changeout of the lead vessels. This is further discussed in Section 6.4.3.

### 6.4 Operations and Maintenance Costs

LCCA was conducted for all tested media, but only the two best performing media of each type, which were the F400 and AV1240LDX GACs and the PSR2 Plus and PFCR-2 IX resins, are discussed in detail. The following sections describe the individual costs that make up the O&M costs included in this LCCA.

#### 6.4.1 Media Bed Life and Changeout Frequency

The LCCA assumes that media changeouts would occur when the PFOA concentration in the lead vessel exceeded the RL of 10 ng/L. This would maximize the media efficiency - in this case, the IX resins all have bed lives greater than 12 months.

Because the PFOA RL is currently the most stringent PFAS guidance criteria for drinking water in California and the relative affinity of PFOA for removal by adsorption, PFOA breakthrough was determined to be the primary driver for media changeouts. Although PFOS was present in influent

water at higher concentrations than PFOA, PFOS did not reach effluent concentrations exceeding the current RL of 40 ng/L during the pilot test. The PFBS response level was recently established at 500 ng/L, which is significantly higher than the influent concentration of PFBS. Other PFAS, including PFHxS, PFHpA, and PFNA, which do not yet have regulatory concentration guidance, notification, or proposed MCL concentrations in California, had a variety of breakthrough times, some of which were earlier or later than that of PFOA. In general, shorter chain PFAS have lower GAC loading capacities and faster breakthrough times than the longer-chain PFAS such as PFOA and PFOS. GAC can also be used as pretreatment to remove non-PFAS organics and longer-chain PFAS, followed by IX to remove short-chain PFAS, should removal of short-chain PFAS become an important regulatory consideration in the future.

Because of better than anticipated performance and limitations on overall pilot test duration, media bed life estimates contain some assumptions that should be considered:

- For media that did not reach PFOA RL concentrations in the column effluent before the end of the pilot study, extrapolation of effluent concentration trends was used for bed life estimation;
- For all GAC columns, linear extrapolation was applied to midpoint breakthrough curves with the estimates being increased by a factor of 1.5 to approximate the bed life of the full column;
- EBCT differences between the IX pilot and the proposed full-scale system (1.2 vs. 2.5 minutes) are assumed to not affect overall breakthrough behavior and bed life; and
- The bed lives previously described in Section 5.2 were used to estimate full-scale performance for the purposes of this LCCA.

Costs for media changeout were applied at the end of the years in which they are anticipated to occur based on the estimated full-scale bed life.

#### **6.4.2 Energy Costs**

Estimates of the energy costs for pumping associated with the media vessels were provided by AqueoUS Vets. These costs were developed under the following assumptions:

- Flow rates of 767 and 1,150 gpm for the GAC and IX treatment trains, respectively;
- Pump motor efficiencies of 75%;
- Energy cost of \$0.08 per kilowatt-hour (kWh);
- Demand cost of \$10 per kilowatt (kW) per month;
- Pump operating time of 24 hours per day;
- Head losses of 22 ft of water (99.7 psi) and 14 ft of water (6.1 psi) for IX and GAC treatment trains, respectively; and
- Annual energy costs are based solely on head loss and do not reflect actual pumping costs.

Annual pumping costs related to media vessel head loss are:

- \$2,265/GAC treatment train X 3 GAC treatment trains = \$6,796; and
- \$5,401/IX treatment train X 2 IX treatment trains = \$10,802.

These costs were applied at the end of each year.

#### **6.4.3 Media Disposal Costs**

Typical spent media handling consists of regeneration, incineration, or land disposal.

Regeneration of adsorbent media is the process of removing contaminants from the media by the use of extreme temperatures, solvents, or brine solutions, so that the media may be reused for additional treatment. All IX resins used in this study are marketed as “single use” and are not intended for regeneration. Thermal regeneration (reactivation) is commonly applied to activated carbons. For the purposes of the LCCA, the cost of reactivation, storage of a “swing” load of GAC to be used in changeouts, freight, and service is assumed to be approximately 70% the cost of virgin GAC. Certain vendors including Calgon Carbon are currently reactivating GAC; however, as PFAS waste management becomes more highly regulated, there is the possibility that reactivation facilities may be challenged to meet PFAS air emissions and PFAS destruction requirements.

Incineration is a thermal waste treatment process that destroys substances by combustion. Incineration carries the risk of incomplete combustion and by-product generation (Stoiber et al., 2020). While incineration is relatively more common in the eastern United States, relatively few facilities are located near the west coast. The incineration facility that is located closest to the Los Angeles area is in Aragonite Incineration Facility located in Dugway, Utah. Because incineration is typically substantially more costly than land disposal and in the case of spent media from LHHCW Well #10 would require considerable freight expense to transport it to the nearest facility, incineration is currently not the most cost-effective disposal method. For this reason, incineration was not considered for the LCCA.

Land disposal is the process of placing waste within engineered earthen burials. Because of the uncertain regulatory landscape with respect to PFAS, most waste disposal companies will only accept waste containing PFAS at Class I hazardous waste landfills, where the waste can be placed in cells with closed-loop leachate containment systems. Of the three disposal options considered, land disposal is currently the most viable for disposal of single use IX resin. There is always the potential long-term liability related to land disposal of waste, should a hazardous waste landfill be required to take site mitigation actions due to unauthorized releases from the landfill. Disposal and waste freight costs in the LCCA were added whenever an IX changeout was to occur.

#### **6.4.4 Freight Costs for Spent Media**

The full-scale IX alternatives would require two IX treatment trains, which means that each changeout would require the transportation of approximately 29 cy or approximately 16.5 tons of IX resin (all IX resins have approximately the same density). If the media were transported in roll off bins with capacities of 18 tons and 16 cy, this means that an IX resin changeout would require two roll off bins.

#### **6.5 Sensitivity Analysis**

Sensitivity analysis was conducted due to the uncertainty of the estimation method used to predict PFOA breakthrough based linear extrapolation. This analysis was conducted by adjusting the estimated bed life up to  $\pm 30\%$ . The results of this analysis for all tested media in terms of 2021 dollars per 1,000 gallons treated are shown in **Figure 10**.

The NPV over a 20-year life for the F400 GAC is approximately \$3,214,000 of which approximately 65% is attributed to capital costs and 35% is attributed to O&M costs. This is equivalent to \$0.13/1,000 gallons. When the bed life was adjusted by  $\pm 30\%$ , the 20-year life cycle cost varied between approximately \$0.12/1,000 gallons treated (77% cost decrease) and \$0.15/1000 gallons treated (16% cost increase).



The NPV over a 20-year life for the AV1240LDX GAC is approximately \$2,920,000 of which approximately 64% is attributed to capital costs and 36% is attributed to O&M costs. This is equivalent to \$0.12/1,000 gallons. When the bed life was adjusted by  $\pm 30\%$ , the 20-year life cycle cost varied between approximately \$0.11/1,000 gallons treated (77% cost decrease) and \$0.14/1,000 gallons treated (14% cost increase).

The NPV over a 20-year life for the PSR2 Plus IX resin is approximately \$2,996,000 of which approximately 46% is attributed to capital costs and 54% is attributed to O&M costs. This is equivalent to \$0.12/1,000 gallons treated. When the bed life was adjusted by  $\pm 30\%$ , the 20-year life cycle cost varied between approximately \$0.11/1,000 gallons treated (13% cost decrease) and \$0.15/1,000 gallons treated (21% cost increase).

The NPV over a 20-year life for the PFCR-2 IX resin is approximately \$3,083,000 of which approximately 43% is attributed to capital costs and 57% is attributed to O&M costs. This is equivalent to \$0.13/1,000 gallons treated. When the bed life was adjusted by  $\pm 30\%$ , the 20-year life cycle cost varied between approximately \$0.11/1,000 gallons treated (12% cost decrease) and \$0.16/1,000 gallons treated (23% cost increase).

Based on the sensitivity analysis, the GAC and IX alternatives are generally equally sensitive to uncertainties in the bed life estimates. This is in contrast to the findings for MTBLW Well #7, which showed that the GAC alternatives were more sensitive to changes in bed life than the IX alternatives (GSI, 2021). This observed difference appears to be driven by a couple of factors including:

- Longer bed lives for the tested GACs at LHCWD Well #10 than at MTBLW Well #7; and
- Higher flow rates at LHCWD Well #10 than at MTBLW Well #7 that necessitate more parallel operating treatment trains, which results in larger volumes of media per changeout.

The analysis of the GAC product performance at LHCWD Well #10 should be qualified by the fact that there is relatively higher uncertainty with respect to bed life compared with the IX resins due to the length of the pilot test and the better than anticipated PFAS removal performance.

## 6.6 LCCA Summary and Evaluation of Alternatives

The following table summarizes the findings of the life cycle cost analyses for the two best performing GACs and IX resins:

Item	F400	AV1240LDX	PSR2 Plus	PFCR-2
Total Equipment & Installation Capital Costs*	\$2,081,000	\$1,876,000	\$1,393,000	\$1,323,000
20-Year Total O&M*	\$1,379,000	\$1,144,000	\$1,968,000	\$2,165,000
20-Year NPV*	\$3,214,000	\$2,920,000	\$2,996,000	\$3,083,000
Life Cycle Cost (\$/1000 gallons)	\$0.13	\$0.12	\$0.12	\$0.13
Life Cycle Cost (\$/acre-ft)	\$43.31	\$39.35	\$40.38	\$41.54

### Notes

\* Rounded to nearest \$1,000.

A more detailed cost summary is provided in **Table 7** which also includes the results for the other four tested media. Based on the above analysis, GSI finds the AV1240LDX GAC to have the lowest NPV, slightly lower than the PSR2 Plus media by a narrow margin (differential NVP of \$76,000). This evaluation is made based on the results of a pilot study that operated for 12

months and a life cycle cost assessment that considered both capital (equipment and media) and future O&M (media changeouts and differential electrical costs for pumping) costs over a 20-year life. An important caveat to this finding is the uncertainty with respect to the bed lives for the GAC products and the way the estimates were calculated. Midpoint sample results were increased by a factor of 1.5 to estimate bed lives for the design EBCT for the purposes of making a comparison. This scale-up factor appears to be supported by the observed differences between the bed lives for the half EBCT (“midpoint” column data) and design EBCT (effluent column data) found during the pilot test at MTBLW Well #7 (differences of 1.5 to 2) (GSI, 2021). Additionally, because the linear extrapolations used the steepest slopes that could be found in the partial breakthrough curves, this adds an additional level of conservatism. Together these two pieces of information suggest that the comparative cost estimates for the GACs in the range of 0 to -30% change in bed life should be representative for these products. However, because both sites have different source water qualities (e.g., minor differences in PFAS concentrations, likely differences in DOC/TOC characteristics, etc.), the ultimate bed lives for the GAC products would need to be confirmed by additional testing.

This analysis did not include additional costs for site-specific work such as concrete pads, electrical, instrumentation and controls setup, etc. or other O&M activities such as GAC backwashing (equipment and well downtime) or system maintenance. Most of these costs are anticipated to be similar between GAC and IX alternatives, however backwashing of GAC vessels would be anticipated to only apply to the GAC alternative (vendors do not recommend backwashing IX). This would result in added costs to the GAC alternative in the form of additional equipment (backwash tank, pump, and plumbing) and labor.

## 7.0 CONCLUSIONS AND LESSONS LEARNED

A summary of the conclusions, recommendations, and lessons learned generated from the pilot test are as follows:

1. PFOA breakthrough is predicted to be the main driver for media changeouts at LHHW Well #10. Although the removal efficiency of short-chain PFAS is typically lower than for PFOA, PFOA’s RL is currently the lowest of all PFAS with current health-based advisory levels for drinking water. The main driver could change as PFAS regulations evolve or if the source water concentrations change.
2. Breakthrough duration, from initial to target threshold concentration (PFOA RL), tended to be gradual for PFOA, with the shortest breakthrough duration being approximately 15,000 bed volumes for PFOA through AV1240LDX, which is anticipated to be approximately 3.5 months at full scale. This would allow for operators to sample relatively infrequently (once per month) and still be able to maximize utilization of media adsorption capacity for PFOA and changeout media prior to complete breakthrough.
3. Perfluorocarboxylic acids tended to breakthrough before perfluorosulfonic acids, with short-chain PFAS generally eluting earlier than long-chain PFAS.
4. TOC and DOC were reported in well water samples at approximately 1 mg/L, which may have affected GAC efficiency for PFAS removal. The overall impact of TOC/DOC on PFAS removal efficiency remains unclear due to the fact that PFOA did not start being detectable in effluent samples until the end of the pilot test (12 months). This contrasts the performance of the same GAC products at the MTBLW Well #7 pilot test which had faster breakthrough with similar levels of TOC and DOC (GSI, 2021). Source water with lower TOC concentrations may result in more efficient GAC performance, however others have pointed out that it is not only the quantity but the characteristics of the organic carbon

that may be important for PFAS adsorption interference (Park et al., 2020). Future pilot tests at other sites may choose to test source water for TOC and DOC to assess GAC's tendency for removing TOC and DOC, reducing bed life for target contaminants.

5. PSR2 Plus had the longest time to break through compared to other resins. While not confirmed, the difference in performance may be in part due to less impact from background sulfate as less sulfate was likely removed by PSR2 Plus than other resins based on results from a similar pilot study (Jacobs, 2021).
6. The relative influent concentrations and adsorption affinities of PFAS compounds affect the overall elution behavior. Chromatographic peaking, a phenomenon where effluent concentrations exceed influent concentrations due to displacement of adsorbed contaminant mass by compounds with higher adsorption affinities, was observed through GACGAC column effluent samples for PFBS. While monitoring of lead-vessel concentrations and the existence of a lag media vessel would ensure that high concentrations of PFAS were not discharged from an adsorption system, changes in influent PFAS concentrations should be monitored because they could affect overall removal performance of key PFAS constituents.
7. Although breakthrough to the RL for PFOA was not achieved for three of the GACs, even conservative estimates of bed lives using linear extrapolations of the steepest, early breakthrough curve slopes showed that GAC is cost competitive with IX resin for LHHCW Well #10.
8. The frequency of changing the pilot test pretreatment cartridge filter indicates that pretreatment costs, such as a bag filter pretreatment system, will need to be considered for any pumpers requiring wellhead treatment.
9. The PSR2 Plus IX resin appeared to have the largest PFOA removal capacity of the four IX resins tested.
10. The reagglomerated carbon (Calgon F400) appears to have outperformed the direct-activated carbons in the pilot test in terms of time to PFOA breakthrough at the RL of 10 ng/L based on midpoint samples.
11. Capital costs tend to differ significantly between GAC and IX alternatives for 20-year life cycles with differences in NPV ranging from approximately \$400,000 to \$700,000, which is attributed to the increased equipment (more treatment trains) and media (additional "swing loads") costs for the GAC alternative.
12. The AV1240LDX GAC was found to narrowly be the most economical media tested based on pilot study results and the 20-year life cycle cost analysis. The PSR2 Plus IX resin was found to be cost competitive with the AV1240LDX with a 20-year NPV differential of \$76,000.
13. All media alternatives generally had similar sensitivities to perturbations in the estimated bed life.
14. Despite differences in bed life performance for PSR2 Plus (~540,000 bed volumes) and PFCR-2 (440,000 bed volumes) IX resins, they are similar in terms of O&M costs due to different unit costs (\$275/ft<sup>3</sup> and \$235/ft<sup>3</sup>, respectively).
15. In addition to GAC treatment of PFOA appearing to be slightly more economical than IX treatment for the water tested at the design flow rate of 2,300 gpm, GAC systems may also be more useful than IX if the groundwater contains other contaminants. For example, groundwater that contains both VOCs and PFAS may use a GAC system for treatment of both compounds. Similarly, groundwater that contains both PFAS and perchlorate may be able to use IX treatment more effectively depending on the choice of resin. However, competing compounds may affect the efficiency of PFAS removal by both GAC and IX, so

groundwater containing additional contaminants (e.g., higher TOC and possibly sulfate depending on resin) may increase the changeout frequencies predicted in this report. Lastly, additional analysis would need to be conducted to evaluate how life cycle costs would scale with increasing design flow rate.

16. If the area available for a wellhead treatment system is limited, a smaller footprint IX treatment system may be more favorable as compared to a GAC treatment system.

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**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED  
CARBON TO TREAT GROUNDWATER IMPACTED WITH  
PER- AND POLYFLUOROALKYL SUBSTANCES  
LA HABRA HEIGHTS COUNTY WATER DISTRICT – WATER SUPPLY WELL #10**

**Tables**

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**TABLE 1: SAMPLING FREQUENCY AND ANALYTICAL METHODS**  
**PFAS Treatment Pilot Study - LHHW Well #10**  
 Water Replenishment District of Southern California

Sampling Date	Sample Locations and Sample Sets				
	Influent (Weekly Set) <sup>1</sup>	Influent (PFAS, DOC, and TOC)	Influent (Monthly Extended Set) <sup>2</sup>	Effluent (PFAS)	Midpoints <sup>3</sup> (PFAS)
04/24/2020			x		
05/06/2020	x			x	
05/12/2020	x			x	
05/19/2020	x			x	
05/26/2020			x	x	
06/02/2020	x			x	
06/09/2020	x			x	
06/16/2020					
06/23/2020					
06/30/2020			x		x
07/07/2020	x			x	
07/15/2020	x			x	
07/24/2020	x			x	
07/30/2020			x		x
08/06/2020	x			x	
08/13/2020	x			x	
08/20/2020			x	x	
08/27/2020	x				x
09/03/2020	x			x	
09/10/2020	x				
09/17/2020			x	x	
09/24/2020					x
10/01/2020				x	
10/08/2020				x	
10/15/2020			x	x	x
10/22/2020				x	
11/05/2020				x	
11/19/2020			x	x	x
12/04/2020				x	

**TABLE 1: SAMPLING FREQUENCY AND ANALYTICAL METHODS**  
**PFAS Treatment Pilot Study - LHCWD Well #10**  
 Water Replenishment District of Southern California

Sampling Date	Sample Locations and Sample Sets				
	Influent (Weekly Set) <sup>1</sup>	Influent (PFAS, DOC, and TOC)	Influent (Monthly Extended Set) <sup>2</sup>	Effluent (PFAS)	Midpoints <sup>3</sup> (PFAS)
01/27/2021		x	x	x	x
02/25/2021		x		x	
03/25/2021		x	x	x	x
04/22/2021		x		x	
05/20/2021		x		x	x
06/03/2021		x		x	
06/20/2021		x		x	x

**Notes:**

1. Weekly sample set consisted of PFAS and general water quality parameters listed in Table 2
2. Monthly influent sample set consisted of general water quality parameters, metals, volatile organic compounds are listed in Table 3
3. Midpoint samples were collected at approximately 50% and 32% of the bed volumes for GAC and IX columns, respectively

**Abbreviations:**

- LHCWD = La Habra Heights County Water District
- PFAS = Per- and polyfluoroalkyl substances
- TOC = Total organic carbon
- DOC = Dissolved organic carbon
- GAC = Granular activated carbon
- IX = Ion exchange
- x = Sample location/sample set collected and analyzed



**TABLE 2: LHCWD WELL #10 INFLUENT WATER QUALITY SUMMARY - PFAS AND GENERAL PARAMETERS**  
 PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California

Sample ID	Sampling Date	PFAS							General Parameters						
		Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluorheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)	Alkalinity in CaCO <sub>3</sub> units	Chloride	Nitrate as Nitrogen	Nitrate as NO <sub>3</sub> (calculation)	Sulfate	Dissolved Organic Carbon	Total Organic Carbon
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
--	05/10/19	12	30	<10	<10	<10	<10	--	--	--	--	--	--	--	
--	07/22/19	15	43	8.6	11	3	2	3.4	--	--	--	--	--	--	
--	09/17/19	13	50	8.6	6.8	2.9	2	2.8	--	--	--	--	--	--	
--	10/23/19	11	33	5.9	4.3	2.3	<1.8	2.3	210	110	2.6	--	180	--	
LH-INF-20200424	04/24/20	12	32	6.3	6.0	2.8	<2.0	3.0	200	100	2.6	12	180	--	0.57
LH-INF-DUP-20200424	04/24/20	12	32	6.9	5.9	2.7	<2.0	2.9	--	--	--	--	--	--	
LH-INF-20200505	05/05/20	14	37	7.3	6.6	3.6	2.2	3.2	200	100	2.7	12	160	--	0.75
LH-INF-20200512	05/12/20	13	34	6.6	5.8	3	<2.0	3.1	200	100	2.7	12	170	--	0.66
LH-INF-DUP-20200512	05/12/20	12	33	6.6	5.9	2.9	<2.0	2.9	--	--	--	--	--	--	
LH-INF-20200519	05/19/20	11	32	6.5	6.3	2.9	<2.0	3.1	200	110	2.8	12	180	--	0.63
LH-INF-20200526	05/26/20	12	32	6.2	5.9	3.1	<2.0	3.3	200	110	2.8	12	170	--	0.6
LH-INF-DUP-20200526	05/26/20	12	31	6.2	5.6	3.2	<2.0	3.3	--	--	--	--	--	--	
LH-INF-20200602	06/02/20	12	32	6.4	6.1	3.2	<2.0	3.1	200	100	2.8	12	170	--	0.6
LH-INF-20200609	06/09/20	12	30	6.4	5.3	2.6	<2.0	3.0	200	110	2.8	12	180	--	0.64
LH-INF-DUP-20200609	06/09/20	12	30	6.0	5.3	2.5	<2.0	3.0	--	--	--	--	--	--	
LH-INF-20200630	06/30/20	12	31	6.3	6.0	3.3	<2.0	2.9	200	100	2.7	12	170	--	0.69
LH-INF-DUP-20200630	06/30/20	12	30	6.1	5.8	3.1	<2.0	2.9	--	--	--	--	--	--	
LH-INF-20200707	07/07/20	12	30	6.5	6.2	3.3	2.1	2.6	200	110	2.8	12	180	--	0.71
LH-INF-20200715	07/15/20	12	32	6.3	6.5	3.4	2.0	3.0	200	110	2.7	12	170	--	0.59
LH-INF-20200724	07/24/20	12	32	6.3	6.0	3.1	<2.0	2.8	200	110	2.8	12	180	--	0.59
LH-INF-20200730	07/30/20	12	31	6.1	5.9	3.0	<2.0	3.1	200	110	2.8	12	180	--	0.64
LH-INF-DUP-20200730	07/30/20	12	30	5.9	5.8	3.0	<2.0	3.2	--	--	--	--	--	--	
LH-INF-20200806	08/06/20	12	33	6.6	6.4	3.3	<2.0	3.2	200	110	2.8	12	180	--	0.59
LH-INF-20200813	08/13/20	11	30	6.1	6.2	3.1	<2.0	3.3	200	110	2.8	12	180	--	0.76
LH-INF-20200820	08/20/20	12	29	6.2	6.0	3.0	<2.0	3.0	200	110	2.9	13	180	--	0.70
LH-INF-20200827	08/27/20	13	33	6.4	6.2	3.3	<2.0	3.0	200	110	2.8	12	180	--	0.74
LH-INF-DUP-20200827	08/27/20	13	32	6.3	6.2	3.3	<2.0	2.9	--	--	--	--	--	--	
LH-INF-20200903	09/03/20	12	31	6.3	6.0	3.4	<2.0	3.2	200	110	2.8	13	180	--	0.76
LH-INF-20200910	09/10/20	12	31	6.3	6.2	3.4	<2.0	3.1	200	110	2.8	12	180	--	0.78
LH-INF-20200917	09/17/20	12	30	6.2	6.5	3.1	<2.0	2.7	200	110	2.8	12	180	--	0.85
LH-INF-20201015	10/15/20	13	32	6.6	6.7	3.8	2.0	3.0	200	110	3.0	13	180	--	0.81
LH-INF-20201119	11/19/20	12	32	6.0	7.1	3.5	<2.0	2.9	200	100	2.8	12	170	--	0.58
LH-INF-20210127	01/27/21	12	31	6.2	6.2	3.7	<2.0	2.8	200	110	2.9	13	170	0.64	1.6
LH-INF-20210224	02/24/21	17	32	6.5	6.7	7.8	2.9	3.4	--	--	--	--	--	1.2	0.58
LH-INF-20210325	03/25/21	13	31	6.3	7.2	4.2	<2.0	3.0	200 J	110	3.0	13	160	0.63	0.95
LH-INF-20210520	05/20/21	12	30	6.1	6.9	4.2	<2.0	2.9	200	100	3.0	13	160	0.84	1.1
LH-INF-20210603	06/03/21	12	30	5.8	6.6	4.1	<2.0	2.7	--	--	--	--	--	0.84	1.0
LH-INF-20210621	06/21/21	12	29	6.0	6.6	3.8	<2.0	3.0	190	100	3.0	13	160	0.90	1.1

**Notes:**

1. La Habra Heights County Water District Well #10 (WRD ID = 202830)
2. Only PFAS compounds with detections in the 2020-2021 Treatment Pilot Study samples are shown in this table. Samples were analyzed for 18 PFAS compounds in total.
3. Historic sample results prior to 2020 are provided by WRD.

**Abbreviations:**

PFAS = Per- and polyfluoroalkyl substances  
 ng/L = nanograms per liter  
 mg/L = milligrams per liter  
 CaCO<sub>3</sub> = calcium carbonate  
 NO<sub>3</sub> = nitrate

WRD = Water Replenishment District  
 LHCWD = La Habra Heights County Water District  
 J = detection is estimated  
 < = not detected at or above the reporting limit shown

**TABLE 3: LHCWD WELL #10 INFLUENT WATER QUALITY SUMMARY - OTHER PARAMETERS**  
 PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California

Sample ID	Sampling Date	Inorganics			Metals								VOCs			Others	
		Total Dissolved Solids (TDS)	Total Suspended Solids (TSS)	Total Hardness as CaCO <sub>3</sub> (Calculated)	Arsenic, Total	Calcium, Total	Hexavalent Chromium (Dissolved)	Magnesium, Total	Potassium, Total	Sodium, Total	Uranium by ICPMS as pCi/L (Calculated)	Uranium, ICAP/MS	2-Butanone (MEK)	Chloroform (Trichloromethane)	Total THM	Oil and Grease	Perchlorate
		mg/L	mg/L	mg/L	µg/L	mg/L	µg/L	mg/L	mg/L	mg/L	pCi/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L
--	10/11/10	630	--	300	2.4	90	--	18	4.6	64	--	--	--	--	--	--	<4
--	10/18/16	620	--	330	<2	99	--	19	4.3	60	--	--	--	--	--	--	<4
--	02/21/19	--	--	--	--	--	--	--	--	--	--	--	<5	<1	--	--	--
--	10/23/19	620	--	380	2.7	110	--	22	5.3	69	--	--	--	--	--	--	<4
LH-INF-20200424	04/24/20	630	<10	360	2.6	110	0.69	21	4.5	68	3.7	5.5	5.8	<0.50	<0.50	1.15	<4.0
LH-INF-20200526	05/26/20	640	<10	360	3.3	110	0.70	21	4.6	67	3.6	5.4	<5.0	0.55	0.55	<0.96	<4.0
LH-INF-20200630	06/30/20	650	<10	360	3.1	110	0.70	21	4.7	70	3.8	5.6	<5.0	0.64	0.64	3.52	<4.0
LH-INF-20200730	07/30/20	650	<10	360	3.3	110	0.67	21	4.7	71	3.8	5.6	<5.0	0.54	0.54	2.38	<4.0
LH-INF-20200820	08/20/20	660	<10	390	--	120	0.67	21	<10	74	3.7	5.6	<5.0	0.63	0.63	<0.95	<4.0
LH-INF-20200917	09/17/20	670	<10	360	3.2	110	0.64	21	4.6	69	3.5	5.2	<5.0	<0.50	<0.50	<0.97	<4.0
LH-INF-20201015	10/15/20	680	<10	360	2.8	110	0.65	21	4.7	69	3.7	5.5	<5.0	0.62	0.62	<0.98	<4.0
LH-INF-20201119	11/19/20	630	<10	360	2.9	110	0.69	21	4.7	69	2.8	4.2	<5.0	0.64	0.64	<0.977	<4.0
LH-INF-20210127	01/27/21	640	<10	360	2.8	110	0.8	21	4.7	70	3.4	5.1	<5.0	0.77	0.77	2.52	<4.0
LH-INF-20210325	03/25/21	640	<10 UJ	360	2.6 J	110	0.86	21	4.6	70	3.3	4.9	<5.0	0.74	0.74	<0.956	<2.0
LH-INF-20210520	05/20/21	650	<10	360	2.7	110	0.74	21	4.6	71	3.4	5.2	<5.0	0.81	0.81	<1.00	<2.0
LH-INF-20210621	06/21/21	640	<10	360	3.2	110	0.76	21	4.6	69	3.6	5.4	<5.0	0.78	0.78	<0.954	<2.0

**Notes:**

1. La Habra Heights County Water District Well #10 (WRD ID = 202830)
2. Only VOCs with detections in the pilot study samples are shown in this table.
3. Historic sample results shown are the last three samples analyzed for inorganics and metals, and the last sample analyzed for VOCs, prior to 2020. Historic sample results prior to 2020 are provided by WRD.

**Abbreviations:**

mg/L = milligrams per liter  
 µg/L = micrograms per liter  
 pCi/L = picoCuries per liter  
 ICPMS = inductively coupled plasma mass spectrometry  
 ICAP/MS = inductively coupled argon plasma mass spectrometry  
 VOCs = volatile organic compounds  
 THM = trihalomethanes

LHCWD = La Habra Heights County Water District  
 WRD = Water Replenishment District  
 J = detection is estimated; UJ = the result is estimated non-detect  
 UJ = the result is estimated non-detect  
 < = not detected at or above the reporting limit shown

**TABLE 4: LHCWD WELL #10 GAC EFFLUENT WATER QUALITY SUMMARY**

PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California

Granular Activated Carbon (GAC) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluorheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
AV1240CB	05/05/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	05/12/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	05/19/20	<2.0	2.4	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	05/26/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	06/02/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	06/09/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	07/07/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	07/15/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	07/24/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	08/06/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	08/13/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	08/20/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	09/03/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	09/10/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	09/17/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	10/01/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	10/08/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	10/15/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	10/22/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	11/05/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	11/19/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	12/04/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	01/27/21	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	02/24/21	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	03/25/21	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	04/22/21	<2.0	<2.0	<2.0	2.0	<2.0	<2.0	<2.0
AV1240CB	05/20/21	<2.0	<2.0	<2.0	2.6	2.4	<2.0	<2.0
AV1240CB	06/03/21	<2.0	<2.0	<2.0	3.4	2.7	<2.0	<2.0
AV1240CB	06/21/21	2.2	<2.0	<2.0	4.1	3.2	<2.0	<2.0





**TABLE 4: LHCWD WELL #10 GAC EFFLUENT WATER QUALITY SUMMARY**  
 PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California

Granular Activated Carbon (GAC) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
AV1240PFAS	07/15/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	07/24/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	08/06/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	08/13/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	08/20/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	09/03/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	09/10/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	09/17/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	10/01/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	10/08/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	10/15/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	10/22/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	11/05/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	11/19/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	12/04/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	01/27/21	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	02/24/21	<2.0	<2.0	<2.0	3.0	<2.0	<2.0	<2.0
AV1240PFAS	03/25/21	<2.0	<2.0	<2.0	3.6	2.2	<2.0	<2.0
AV1240PFAS	04/22/21	<2.0	<2.0	<2.0	5.2	2.9	<2.0	<2.0
AV1240PFAS	05/20/21	<2.0	<2.0	<2.0	6.1	3.7	<2.0	<2.0
AV1240PFAS	06/03/21	<2.0	<2.0	<2.0	6.8	3.7	<2.0	<2.0
AV1240PFAS	06/21/21	<2.0	<2.0	<2.0	7.5	4.3	<2.0	<2.0
AV1240PFAS M	06/30/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS M	07/30/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS M	08/27/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS M	09/24/20	2.6	<2.0	<2.0	4.7	2.6	<2.0	<2.0
AV1240PFAS M	10/15/20	<2.0	<2.0	<2.0	4.3	2.8	<2.0	<2.0
AV1240PFAS M	11/19/20	5.5	3.6	2.6	6.3	3.5	<2.0	<2.0



**TABLE 4: LHHCWD WELL #10 GAC EFFLUENT WATER QUALITY SUMMARY**  
**PFAS Treatment Pilot Study**  
 Water Replenishment District of Southern California

Granular Activated Carbon (GAC) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
F400	03/25/21	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	04/22/21	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	05/20/21	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	06/03/21	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	06/21/21	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400 M	06/30/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400 M	07/30/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400 M	08/27/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400 M	09/24/20	<2.0	2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400 M	10/15/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400 M	11/19/20	<2.0	2.3	<2.0	2.3	<2.0	<2.0	<2.0
F400 M	01/27/21	<2.0	2.2	<2.0	<2.0	<2.0	<2.0	<2.0
F400 M	03/25/21	3.2	3.6	<2.0	2.6	<2.0	<2.0	<2.0
F400 M	05/20/21	3.1	3.5	<2.0	2.8	2.0	<2.0	<2.0
F400 M	06/21/21	4.5	4.6	<2.0	4.1	2.6	<2.0	<2.0

**Notes:**

1. La Habra Heights County Water District Well #10 (WRD ID = 202830)
2. Only PFAS compounds with detections in the 2020-2021 Treatment Pilot Study influent samples are shown in this table. Samples were analyzed for 18 PFAS compounds in total.

**Abbreviations:**

PFAS = Per- and polyfluoroalkyl substances  
 ng/L = nanograms per liter  
 GAC = granular activated carbon

M = midpoint sample  
 LHHCWD = La Habra Heights County Water District  
 < = not detected at or above the reporting limit shown



**TABLE 5: LHCWD WELL #10 IX EFFLUENT WATER QUALITY SUMMARY**  
 PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California

Ion Exchange (IX) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
PSR2 Plus	05/05/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	05/12/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	05/19/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	05/26/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	06/02/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	06/09/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	07/07/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	07/15/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	07/24/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	08/06/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	08/13/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	08/20/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	09/03/20	<2.0	<2.0	<2.0	<2.0	2.1	<2.0	<2.0
PSR2 Plus	09/10/20	<2.0	<2.0	<2.0	<2.0	2.2	<2.0	<2.0
PSR2 Plus	09/17/20	<2.0	<2.0	<2.0	<2.0	2.0	<2.0	<2.0
PSR2 Plus	10/01/20	<2.0	<2.0	<2.0	<2.0	2.4	<2.0	<2.0
PSR2 Plus	10/08/20	<2.0	<2.0	<2.0	<2.0	2.4	<2.0	<2.0
PSR2 Plus	10/15/20	2.8	<2.0	<2.0	<2.0	3.0	<2.0	<2.0
PSR2 Plus	10/22/20	<2.0	<2.0	<2.0	<2.0	2.4	<2.0	<2.0
PSR2 Plus	11/05/20	2.5	<2.0	<2.0	<2.0	3.0	<2.0	<2.0
PSR2 Plus	11/19/20	2.4	<2.0	<2.0	<2.0	3.2	<2.0	<2.0
PSR2 Plus	12/04/20	3.1	<2.0	<2.0	<2.0	3.2	<2.0	<2.0
PSR2 Plus	01/27/21	2.9	<2.0	<2.0	<2.0	3.3	<2.0	<2.0
PSR2 Plus	02/24/21	3.6	<2.0	<2.0	<2.0	4.0	<2.0	<2.0
PSR2 Plus	03/25/21	3.8	<2.0	<2.0	<2.0	3.9	<2.0	<2.0
PSR2 Plus	04/22/21	4.7	<2.0	<2.0	<2.0	4.0	<2.0	<2.0
PSR2 Plus	05/20/21	5.2	<2.0	<2.0	<2.0	4.3	<2.0	<2.0
PSR2 Plus	06/03/21	5.2	<2.0	<2.0	<2.0	4.0	<2.0	<2.0
PSR2 Plus	06/21/21	5.0	<2.0	<2.0	<2.0	4.8	<2.0	<2.0

**TABLE 5: LHCWD WELL #10 IX EFFLUENT WATER QUALITY SUMMARY**  
 PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California

Ion Exchange (IX) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluorheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
PSR2 Plus M	06/30/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus M	07/30/20	4.4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus M	08/27/20	4.8	<2.0	<2.0	<2.0	2.0	<2.0	<2.0
PSR2 Plus M	09/24/20	7.2	3.8	<2.0	<2.0	2.8	<2.0	<2.0
PSR2 Plus M	10/15/20	6.3	3.7	<2.0	<2.0	2.4	<2.0	<2.0
PSR2 Plus M	11/19/20	7.5	4.2	<2.0	2.0	3.0	<2.0	<2.0
PSR2 Plus M	01/27/21	6.4	4.4	<2.0	<2.0	2.7	<2.0	<2.0
PSR2 Plus M	03/25/21	7.4	5.3	<2.0	2.2	3.1	<2.0	<2.0
PSR2 Plus M	05/20/21	8.0	5.7	<2.0	2.3	3.3	<2.0	<2.0
PSR2 Plus M	06/21/21	9.3	7.1	<2.0	3.1	3.5	<2.0	2.0
SIR-110-HP	05/05/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	05/12/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	05/19/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	05/26/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	06/02/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	06/09/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	07/07/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	07/15/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	07/24/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	08/06/20	<2.0	<2.0	<2.0	<2.0	2.3	<2.0	<2.0
SIR-110-HP	08/13/20	<2.0	<2.0	<2.0	<2.0	2.4	<2.0	<2.0
SIR-110-HP	08/20/20	<2.0	<2.0	<2.0	<2.0	2.7	<2.0	<2.0
SIR-110-HP	09/03/20	<2.0	<2.0	<2.0	<2.0	3.1	<2.0	<2.0
SIR-110-HP	09/10/20	<2.0	<2.0	<2.0	<2.0	3.6	<2.0	<2.0
SIR-110-HP	09/17/20	<2.0	<2.0	<2.0	<2.0	3.5	<2.0	<2.0
SIR-110-HP	10/01/20	<2.0	<2.0	<2.0	<2.0	3.9	<2.0	<2.0
SIR-110-HP	10/08/20	<2.0	<2.0	<2.0	<2.0	4.1	<2.0	<2.0
SIR-110-HP	10/15/20	<2.0	<2.0	<2.0	<2.0	4.2	<2.0	<2.0

**TABLE 5: LHCWD WELL #10 IX EFFLUENT WATER QUALITY SUMMARY**  
 PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California

Ion Exchange (IX) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluorheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
SIR-110-HP	10/22/20	<2.0	<2.0	<2.0	<2.0	4.0	<2.0	<2.0
SIR-110-HP	11/05/20	<2.0	<2.0	<2.0	<2.0	3.8	<2.0	<2.0
SIR-110-HP	11/19/20	<2.0	<2.0	<2.0	<2.0	4.2	<2.0	<2.0
SIR-110-HP	12/04/20	<2.0	<2.0	<2.0	<2.0	4.0	<2.0	<2.0
SIR-110-HP	01/27/21	<2.0	<2.0	<2.0	<2.0	3.8	<2.0	<2.0
SIR-110-HP	02/24/21	2.2	<2.0	<2.0	<2.0	4.3	<2.0	<2.0
SIR-110-HP	03/25/21	3.0	<2.0	<2.0	<2.0	4.2	2.3	<2.0
SIR-110-HP	04/22/21	4.6	<2.0	<2.0	<2.0	4.3	2.0	<2.0
SIR-110-HP	05/20/21	6.0	<2.0	<2.0	<2.0	4.5	2.3	<2.0
SIR-110-HP	06/03/21	6.7	<2.0	<2.0	<2.0	4.1	2.0	<2.0
SIR-110-HP	06/21/21	7.0	<2.0	<2.0	<2.0	4.2	<2.0	<2.0
SIR-110-HP M	06/30/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP M	07/30/20	2.6	<2.0	<2.0	<2.0	2.4	<2.0	<2.0
SIR-110-HP M	08/27/20	4.5	<2.0	<2.0	<2.0	2.6	<2.0	<2.0
SIR-110-HP M	09/24/20	8.4	<2.0	<2.0	<2.0	3.4	<2.0	<2.0
SIR-110-HP M	10/15/20	8.6	<2.0	<2.0	<2.0	3.8	<2.0	<2.0
SIR-110-HP M	11/19/20	8.7	<2.0	<2.0	<2.0	3.6	<2.0	<2.0
SIR-110-HP M	01/27/21	8.1	<2.0	<2.0	<2.0	3.6	<2.0	<2.0
SIR-110-HP M	03/25/21	8.7	2.0	<2.0	2.6	3.8	<2.0	<2.0
SIR-110-HP M	05/20/21	8.6	2.6	<2.0	2.0	3.8	<2.0	<2.0
SIR-110-HP M	06/21/21	9.9	3.5	<2.0	3.2	3.6	<2.0	2.0
PFA694E	05/05/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFA694E	05/12/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFA694E	05/19/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFA694E	05/26/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFA694E	06/02/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFA694E	06/09/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFA694E	07/07/20	<2.0	<2.0	<2.0	<2.0	2.0	<2.0	<2.0

**TABLE 5: LHCWD WELL #10 IX EFFLUENT WATER QUALITY SUMMARY**  
 PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California

Ion Exchange (IX) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluorheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
PFA694E	07/15/20	<2.0	<2.0	<2.0	<2.0	2.0	<2.0	<2.0
PFA694E	07/24/20	<2.0	<2.0	<2.0	<2.0	3.0	<2.0	<2.0
PFA694E	08/06/20	<2.0	<2.0	<2.0	<2.0	3.5	<2.0	<2.0
PFA694E	08/13/20	<2.0	<2.0	<2.0	<2.0	3.0	<2.0	<2.0
PFA694E	08/20/20	<2.0	<2.0	<2.0	<2.0	3.4	<2.0	<2.0
PFA694E	09/03/20	<2.0	<2.0	<2.0	<2.0	3.7	<2.0	<2.0
PFA694E	09/10/20	<2.0	<2.0	<2.0	<2.0	3.7	<2.0	<2.0
PFA694E	09/17/20	<2.0	<2.0	<2.0	<2.0	3.7	<2.0	<2.0
PFA694E	10/01/20	<2.0	<2.0	<2.0	<2.0	4.0	<2.0	<2.0
PFA694E	10/08/20	<2.0	<2.0	<2.0	<2.0	4.0	<2.0	<2.0
PFA694E	10/15/20	<2.0	<2.0	<2.0	<2.0	4.2	<2.0	<2.0
PFA694E	10/22/20	<2.0	<2.0	<2.0	<2.0	4.0	<2.0	<2.0
PFA694E	11/05/20	<2.0	<2.0	<2.0	<2.0	3.7	<2.0	<2.0
PFA694E	11/19/20	2.0	<2.0	<2.0	<2.0	4.0	2.1	<2.0
PFA694E	12/04/20	2.5	<2.0	<2.0	<2.0	3.9	2.2	<2.0
PFA694E	01/27/21	3.8	<2.0	<2.0	<2.0	3.8	2.2	<2.0
PFA694E	02/24/21	5.3	<2.0	<2.0	<2.0	4.3	2.3	<2.0
PFA694E	03/25/21	6.6	<2.0	<2.0	<2.0	4.3	2.2	<2.0
PFA694E	04/22/21	9.0	<2.0	<2.0	<2.0	4.1	2.2	<2.0
PFA694E	05/20/21	11	<2.0	<2.0	<2.0	4.1	2.1	<2.0
PFA694E	06/03/21	11	<2.0	<2.0	<2.0	4.2	2.1	<2.0
PFA694E	06/21/21	12	<2.0	<2.0	<2.0	4.2	2.0	<2.0
PFA694E M	06/30/20	<2.0	<2.0	<2.0	<2.0	2.2	<2.0	<2.0
PFA694E M	07/30/20	3.8	<2.0	<2.0	<2.0	2.4	<2.0	<2.0
PFA694E M	08/27/20	4.4	<2.0	<2.0	<2.0	2.2	<2.0	<2.0
PFA694E M	09/24/20	8.5	<2.0	<2.0	2.9	3.0	<2.0	<2.0
PFA694E M	10/15/20	9.8	<2.0	<2.0	3.1	3.6	<2.0	<2.0
PFA694E M	11/19/20	8.8	<2.0	<2.0	3.5	3.6	<2.0	<2.0

**TABLE 5: LHCWD WELL #10 IX EFFLUENT WATER QUALITY SUMMARY**  
 PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California

Ion Exchange (IX) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluorheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
PFA694E M	01/27/21	7.6	<2.0	<2.0	2.6	3.1	<2.0	<2.0
PFA694E M	03/25/21	8.7	2.8	<2.0	4.00	3.6	<2.0	<2.0
PFA694E M	05/20/21	8.7	4.2	<2.0	3.7	3.7	<2.0	<2.0
PFA694E M	06/21/21	8.6	4.6	<2.0	3.90	3.5	<2.0	2.0
PFCR-2	05/05/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	05/12/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	05/19/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	05/26/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	06/02/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	06/09/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	07/07/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	07/15/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	07/24/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	08/06/20	<2.0	<2.0	<2.0	<2.0	2.0	<2.0	<2.0
PFCR-2	08/13/20	<2.0	<2.0	<2.0	<2.0	2.2	<2.0	<2.0
PFCR-2	08/20/20	<2.0	<2.0	<2.0	<2.0	2.9	<2.0	<2.0
PFCR-2	09/03/20	<2.0	<2.0	<2.0	<2.0	3.2	<2.0	<2.0
PFCR-2	09/10/20	<2.0	<2.0	<2.0	<2.0	3.5	<2.0	<2.0
PFCR-2	09/17/20	<2.0	<2.0	<2.0	<2.0	3.6	<2.0	<2.0
PFCR-2	10/01/20	<2.0	<2.0	<2.0	<2.0	3.8	<2.0	<2.0
PFCR-2	10/08/20	<2.0	<2.0	<2.0	<2.0	4.1	<2.0	<2.0
PFCR-2	10/15/20	<2.0	<2.0	<2.0	<2.0	4.4	<2.0	<2.0
PFCR-2	10/22/20	<2.0	<2.0	<2.0	<2.0	4.0	<2.0	<2.0
PFCR-2	11/05/20	<2.0	<2.0	<2.0	<2.0	4.0	<2.0	<2.0
PFCR-2	11/19/20	<2.0	<2.0	<2.0	<2.0	4.1	<2.0	<2.0
PFCR-2	12/04/20	<2.0	<2.0	<2.0	<2.0	3.9	<2.0	<2.0
PFCR-2	01/27/21	<2.0	<2.0	<2.0	<2.0	4.0	<2.0	<2.0
PFCR-2	02/24/21	2.1	<2.0	<2.0	<2.0	4.2	<2.0	<2.0

**TABLE 5: LHHCWD WELL #10 IX EFFLUENT WATER QUALITY SUMMARY**  
**PFAS Treatment Pilot Study**  
 Water Replenishment District of Southern California

Ion Exchange (IX) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluorheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
PFCR-2	03/25/21	2.8	<2.0	<2.0	<2.0	4.1	2.2	<2.0
PFCR-2	04/22/21	4.6	<2.0	<2.0	<2.0	4.1	2.2	<2.0
PFCR-2	05/20/21	6.2	<2.0	<2.0	<2.0	4.5	2.4	<2.0
PFCR-2	06/03/21	6.8	<2.0	<2.0	<2.0	4.1	2.2	<2.0
PFCR-2	06/21/21	7.9	<2.0	<2.0	<2.0	4.2	2.2	<2.0
PFCR-2 M	06/30/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2 M	07/30/20	2.3	<2.0	<2.0	<2.0	2.0	<2.0	<2.0
PFCR-2 M	08/27/20	3.8	<2.0	<2.0	<2.0	2.2	<2.0	<2.0
PFCR-2 M	09/24/20	7.6	<2.0	<2.0	<2.0	3.2	<2.0	<2.0
PFCR-2 M	10/15/20	11	2.0	<2.0	2.7	3.8	2.0	<2.0
PFCR-2 M	11/19/20	13	3.1	<2.0	5.0	3.4	<2.0	2.4
PFCR-2 M	01/27/21	11	3.3	<2.0	3.8	3.7	<2.0	2
PFCR-2 M	03/25/21	12	4.4	<2.0	4.8	4.0	2.1	2.2
PFCR-2 M	05/20/21	13	6.1	2.0	4.3	4.0	2.1	2.3
PFCR-2 M	06/21/21	12	7.4	2.5	5.6	3.8	<2.0	2.7

**Notes:**

1. La Habra Heights County Water District Well #10 (WRD ID = 202830)
2. Only PFAS compounds with detections in the 2020-2021 Treatment Pilot Study influent samples are shown in this table. Samples were analyzed for 18 PFAS compounds in total.

**Abbreviations:**

PFAS = Per- and polyfluoroalkyl substances  
 ng/L = nanograms per liter  
 IX = ion exchange

M = midpoint sample  
 LHHCWD = La Habra Heights County Water District  
 < = not detected at or above the reporting limit shown

**TABLE 6: LHCWD WELL #10 BACTERIAL TESTING RESULTS**  
 PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California

Sample ID	Sample Date	18 Hour E. Coli Confirmed (Large Wells)	18 Hour E. Coli Confirmed (Small Wells)	18 Hour Total Coliform Confirmed (Large Wells)	18 Hour Total Coliform Confirmed (Small Wells)	E. Coli Bacteria	E. Coli Bacteria	Heterotrophic Plate Count	Total Coliform Bacteria	Total Coliform Bacteria
		PW	PW	PW	PW	P/A	MPN/100 mL	CFU/ml	P/A	MPN/100 mL
LH-INF-20200730	07/30/20	ND	ND	ND	ND	Absent	<1.0	4,100	Absent	<1.0
LH-EFF-20200730	07/30/20	ND	ND	ND	ND	Absent	<1.0	3,700	Absent	<1.0

**Abbreviations:**

E. Coli = Escherichia coli bacteria (intestinal bacteria), a type of coliform bacteria.  
 PW = positive wells  
 P/A = presence or absence  
 MPN/100mL = most probably number per 100 milliliters  
 CFU/ml = colony forming units per milliliter  
 ND = not detected  
 LHCWD = La Habra Heights County Water District

**TABLE 7: LIFE CYCLE COST ANALYSIS FOR FULL SCALE**  
 PFAS Treatment Pilot Study - LHCWD Well #10  
 Water Replenishment District of Southern California

Item	GAC				IX Resin			
	Filtrisorb 400	AV 1240 LDX	AV 1240 Coal Base	AV 1240 PFAS	PSR2 Plus	PFCR-2	SIR-110-HP	PFA694E
<b>Capital Costs</b>								
Design Flow Rate (gpm)	2300	2300	2300	2300	2300	2300	2300	2300
Train Design Flow Rate (gpm) (each lead-lag)	767	767	767	767	1150	1150	1150	1150
Number of Trains (two vessels per train)	3	3	3	3	2	2	2	2
Capital Cost Excluding Media and Common Items (\$/train)	\$445,563	\$445,563	\$445,563	\$445,563	\$415,800	\$415,800	\$415,800	\$415,800
Media Density (lbs/ft <sup>3</sup> )	33.7	25	31.2	28.7	43	43	41	42
Bed Volume (ft <sup>3</sup> ) (per vessel)	1,003	1,025	1,025	1,025	384	384	384	384
Bed Volume (gal)	7,502	7,667	7,667	7,667	2,872	2,872	2,872	2,872
Media Per Vessel (lb GAC / ft <sup>3</sup> IX)	33,801	25,625	31,980	29,418	384	384	384	384
Unit Media Cost (\$/lb GAC / \$/ft <sup>3</sup> IX)	\$1.75	\$1.55	\$1.65	\$1.90	\$275	\$275	\$310	\$275
Media Bed Cost (\$/vessel)	\$59,152	\$39,719	\$52,767	\$55,893	\$105,600	\$105,600	\$119,040	\$105,600
Number of Bed Volumes of Media	9	9	9	9	4	4	4	4
Total System Equipment Capital Cost (\$) <sup>1</sup>	\$1,470,356	\$1,470,356	\$1,470,356	\$1,470,356	\$914,760	\$914,760	\$914,760	\$914,760
Total Media Capital Cost (\$) <sup>1</sup>	\$598,449	\$393,216	\$522,393	\$553,343	\$466,400	\$396,000	\$523,600	\$466,400
Installation Cost (\$) (only vessels and associated piping)	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000
<b>Total Capital Cost (\$) <sup>1</sup></b>	<b>\$2,081,000</b>	<b>\$1,876,000</b>	<b>\$2,005,000</b>	<b>\$2,036,000</b>	<b>\$1,393,000</b>	<b>\$1,323,000</b>	<b>\$1,450,000</b>	<b>\$1,393,000</b>
<b>O&amp;M Costs</b>								
<b>Media</b>								
EBCT (min)	10	10	10	10	2.5	2.5	2.5	2.5
Treatment Rate (BV/hr)	6	6	6	6	24	24	24	24
Estimated Bed Life (BVs)	94,500	72,000	67,500	67,500	540,000	440,000	450,000	360,000
Estimated Bed Life (Months)	21.9	16.7	15.6	15.6	31.2	25.4	26.0	20.8
Media Changeout Volume (ft <sup>3</sup> )	3,009	3,075	3,075	3,075	768	768	768	768
Media Changeout Weight (tons)	50.7	38.4	48.0	44.1	16.5	16.5	15.7	16.1
Media Condition	Reactivated	Reactivated	Reactivated	Reactivated	Virgin	Virgin	Virgin	Virgin
Unit Cost of Changeout Media (\$/lb GAC / \$/ft <sup>3</sup> IX) <sup>2</sup>	\$1.20	\$1.06	\$1.13	\$1.30	\$275	\$275	\$310	\$275
Media Cost (\$/Changeout) <sup>1</sup>	<b>\$122,000</b>	<b>\$119,000</b>	<b>\$158,000</b>	<b>\$168,000</b>	<b>\$232,000</b>	<b>\$232,000</b>	<b>\$262,000</b>	<b>\$232,000</b>
<b>Spent Media Disposal</b>								
Transportation and Disposal Cost (\$/Changeout)	Included in changeout price	Included in changeout price	Included in changeout price	Included in changeout price	\$18,000	\$18,000	\$18,000	\$18,000
<b>Pumping Costs Based on Head Loss</b>								
Annual Cost/System (\$)	\$2,106	\$2,265	\$2,265	\$2,265	\$11,330	\$11,330	\$11,330	\$11,330
Annual Total Cost (\$)	<b>\$6,318</b>	<b>\$6,795</b>	<b>\$6,795</b>	<b>\$6,795</b>	<b>\$22,660</b>	<b>\$22,660</b>	<b>\$22,660</b>	<b>\$22,660</b>



**TABLE 7: LIFE CYCLE COST ANALYSIS FOR FULL SCALE**  
 PFAS Treatment Pilot Study - LHCWD Well #10  
 Water Replenishment District of Southern California

Item	GAC				IX Resin			
	Filtrisorb 400	AV 1240 LDX	AV 1240 Coal Base	AV 1240 PFAS	PSR2 Plus	PFCR-2	SIR-110-HP	PFA694E
<b>Life Cycle Costs</b>								
Total Installed Capital Costs	\$2,081,000	\$1,876,000	\$2,005,000	\$2,036,000	\$1,393,000	\$1,323,000	\$1,450,000	\$1,393,000
20-Year Total O&M	\$1,379,000	\$1,144,000	\$1,764,000	\$1,861,000	\$1,968,000	\$2,165,000	\$2,735,000	\$2,970,000
20-Year Net Present Value <sup>3</sup>	\$3,214,000	\$2,920,000	\$3,444,000	\$3,553,000	\$2,996,000	\$3,083,000	\$3,661,000	\$3,816,000
Life Cycle Cost (\$/1000 gallons) <sup>3</sup>	\$0.13	\$0.12	\$0.14	\$0.15	\$0.12	\$0.13	\$0.15	\$0.16
Life Cycle Cost (\$/acre-ft gallons) <sup>3</sup>	\$43.31	\$39.35	\$46.41	\$47.89	\$40.38	\$41.54	\$49.34	\$51.43

**Abbreviations:**

LHCWD = La Habra Heights County Water District    lbs = pounds    EBCT = empty bed contact time  
 MGD = million gallons per day    gal = gallons    ft<sup>3</sup> = cubic feet  
 gpm = gallons per minute    BV = Bed Volume

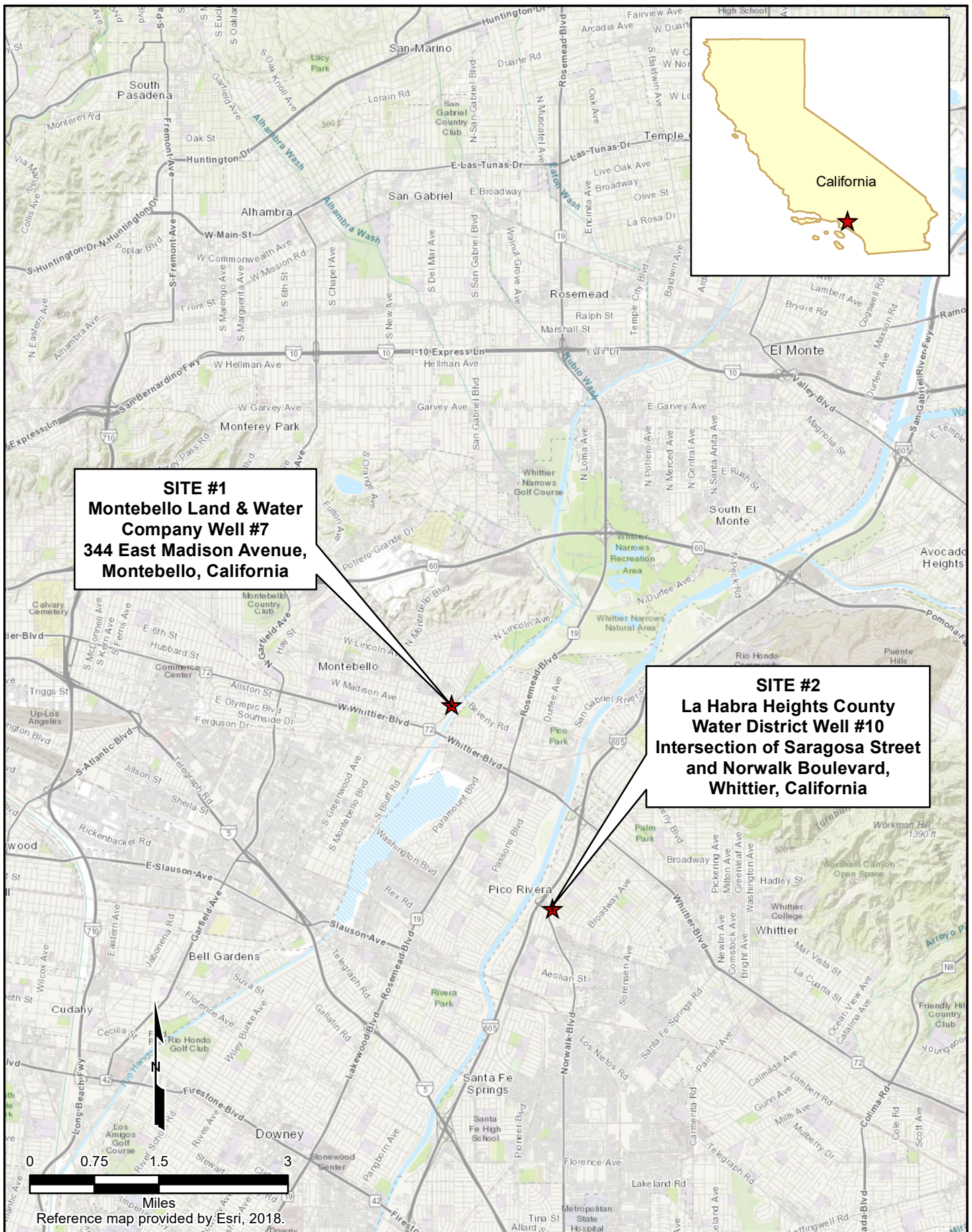
**Notes:**

1. A tax rate of 10% was applied to equipment and virgin media (not applied to reactivated media).
2. The unit cost for changeout GAC is assumed to be approximately 70% of the virgin GAC cost and includes service fees, warehousing of "swing loads," and reactivation. The IX unit cost is for virgin material. Both unit costs include freight.
3. The interest rate is assumed to be 3% and the discount rate is assumed to be 5%.  
 The design flow rate is 2,300 gpm.  
 Changeout trigger is assumed to be the PFOA response level (RL).

**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED  
CARBON TO TREAT GROUNDWATER IMPACTED WITH  
PER- AND POLYFLUOROALKYL SUBSTANCES  
LA HABRA HEIGHTS COUNTY WATER DISTRICT – WATER SUPPLY WELL #10**

**Figures**

- Figure 1 Pilot Test Site Vicinity Map*
- Figure 2 Pilot Test Site Map*
- Figure 3 Pilot Test Manifold Piping and Instrumentation Diagram*
- Figure 4 PFOA GAC Breakthrough Curves*
- Figure 5 PFOS GAC Breakthrough Curves*
- Figure 6 PFOA IX Breakthrough Curves*
- Figure 7 PFOS IX Breakthrough Curves*
- Figure 8 GAC PFOA Breakthrough Estimation Curves*
- Figure 9 IX PFOA Breakthrough Estimation Curves*
- Figure 10 Bed Life Sensitivity Analysis*



**SITE #1**  
**Montebello Land & Water**  
**Company Well #7**  
**344 East Madison Avenue,**  
**Montebello, California**

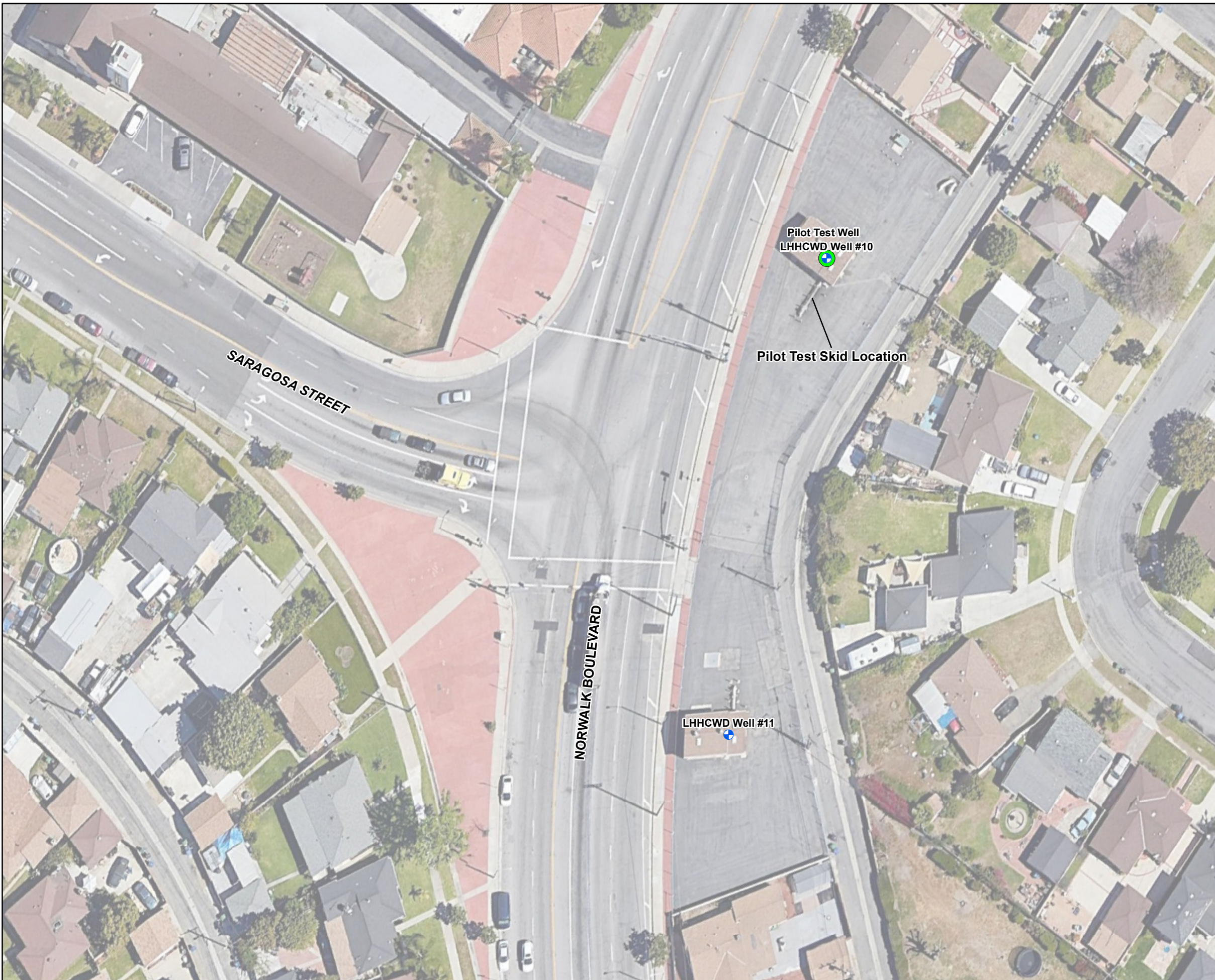
**SITE #2**  
**La Habra Heights County**  
**Water District Well #10**  
**Intersection of Saragosa Street**  
**and Norwalk Boulevard,**  
**Whittier, California**





GSI Job No.	5302	Drawn by:	AV
Issued:	6-Oct-2021	Chk'd by:	MJ
Revised:		Apr'd by:	PEG
Map ID:	WRDPFAS_SiteLocMap	<b>FIGURE 1</b>	

**SITE LOCATIONS MAP**

PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California

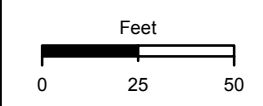


**LEGEND**

-  La Habra Heights County Water District (LHCWD) Production Well Location
-  Pilot Test Well

**Note**

Aerial image provided by Google Earth Pro, March 2018.



Projected Coordinate System  
 Datum: NAD 83  
 State Plane California Zone V  
 Units: Feet

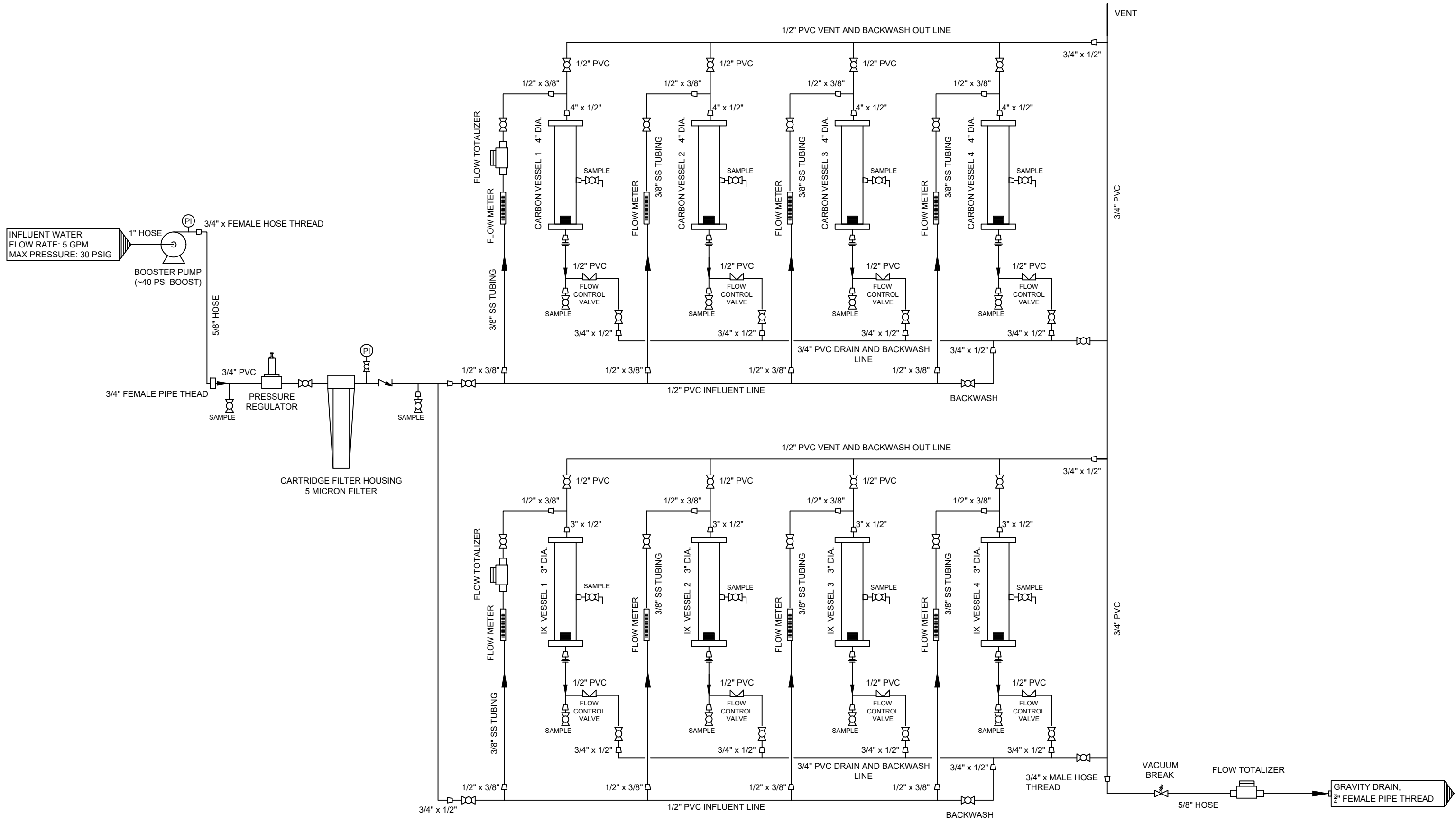


**SITE #2 - LA HABRA HEIGHTS COUNTY WATER DISTRICT WELL #10  
 INTERSECTION OF SARAGOSA STREET AND NORWALK BOULEVARD,  
 WHITTIER, CALIFORNIA**

PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California

GSI Job No.	5302	Drawn By:	AV
Issued:	6-Oct-2021	Chk'd By:	MJ
Map ID:	WRDPFAS_LHCWD	Appv'd By:	PEG

**FIGURE 2**



**SYSTEM NOTES**

1. TEST VESSELS: 3" AND 4" CLEAR PVC X 5' LENGTH
2. IX RESIN BED: 3" DIA., 2.4' DEPTH
3. CARBON MEDIA BED: 4" DIA., 4' DEPTH
4. FLOW RATE THROUGH TEST VESSELS:
  - 4.1. IX VESSELS: 0.72 GPM EACH
  - 4.2. CARBON VESSELS: 0.25 GPM EACH

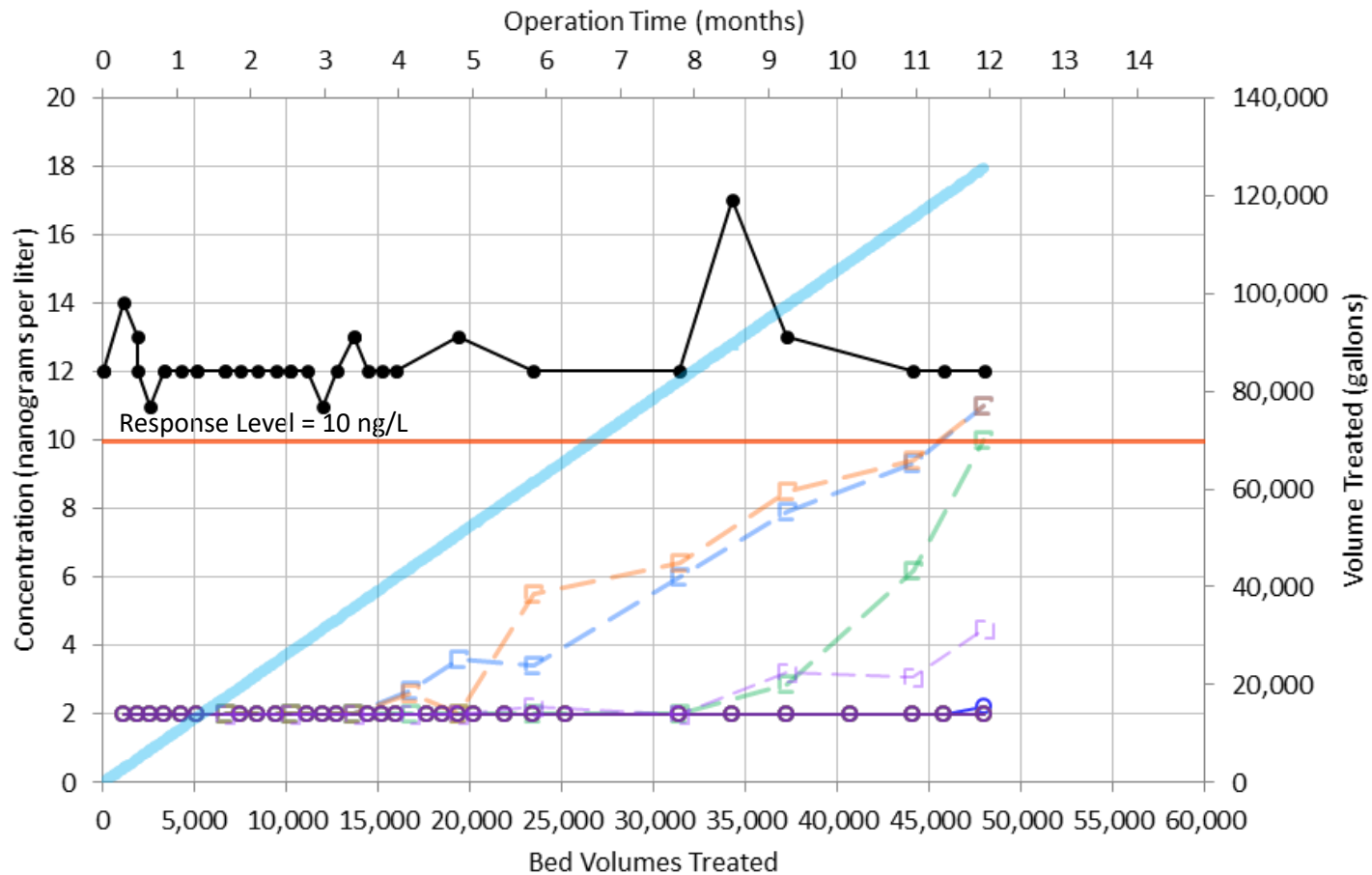
PIPING AND INSTRUMENTATION DIAGRAM PROVIDED BY AQUEOUS VETS, DATED 17 FEBRUARY 2020.

**GSI ENVIRONMENTAL INC.**  
 19200 VON KARMAN AVENUE, SUITE 800  
 IRVINE, CA 92612  
 949.679.1070

GSI Job No:	5302	Drawn By:	BMV
Issued:	6-Oct-2021	Chk'd By:	RDT
Revised:	--	Apr'd By:	PEG
Scale:	NOT TO SCALE	<b>FIGURE 3</b>	

**PILOT TEST MANIFOLD**  
**PIPING AND INSTRUMENTATION DIAGRAM**  
**LA HABRA HEIGHTS COUNTY WATER DISTRICT #10**  
 WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA  
 4040 Paramount Blvd.  
 Lakewood, California 90712

### LHHCWD Well #10 - Perfluorooctanoic acid (PFOA) GAC Samples



**Notes:**

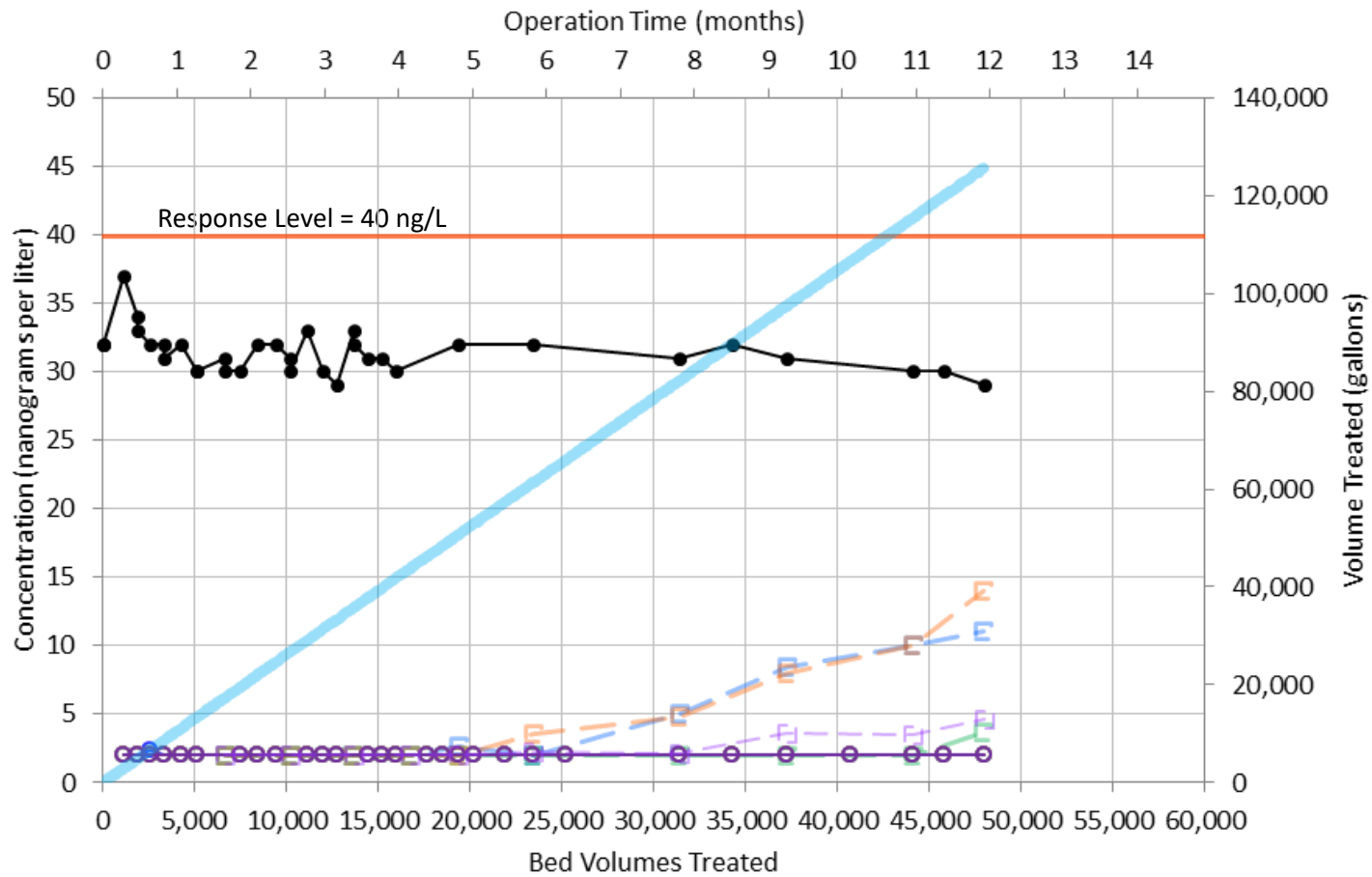
1. "M" on treatment samples indicates mid-point sample (at one half of column bed length).
2. F400 = Filtrasorb 400.
3. GAC = granular activated carbon.
4. LHHCWD = La Habra Heights County Water District.

- AV1240CB
- AV1240CB M
- AV1240LDX
- AV1240LDX M
- AV1240FPAS
- AV1240FPAS M
- F400
- F400 M
- Influent
- Water Volume Treated

	GSI Job No. 5302	Drawn By: GM
	Issued: 6-Oct-21	Chk'd By: MJ
	Revised:	Aprv'd By: PEG
	Scale:	Figure 4

**PFOA GAC BREAKTHROUGH CURVES**  
PFAS Treatment Pilot Study  
Water Replenishment District of Southern California

## LHHCWD Well #10 - Perfluorooctanesulfonic acid (PFOS) GAC Samples



**Notes:**

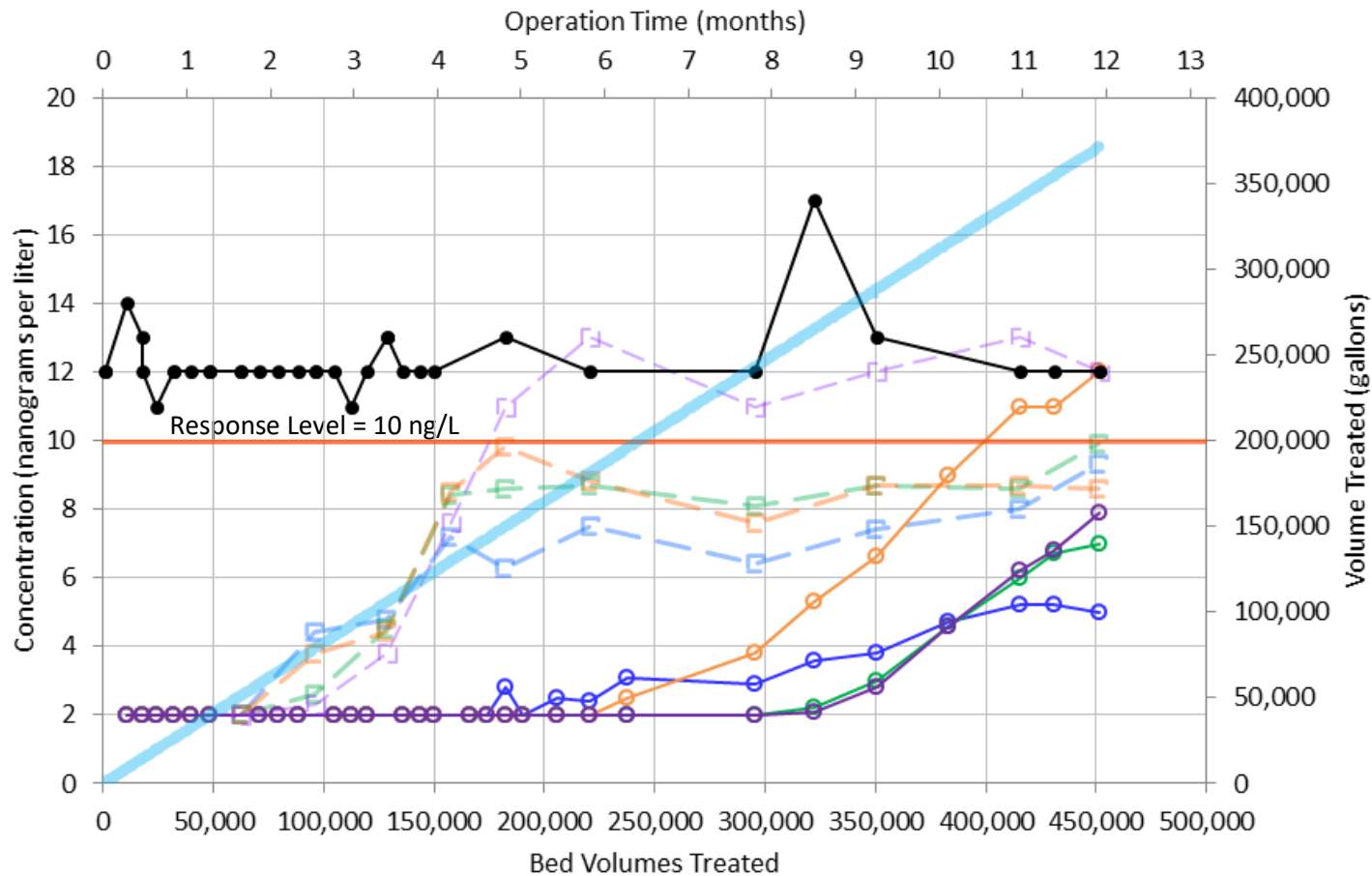
1. "M" on treatment samples indicates mid-point sample (at one half of column bed length).
2. F400 = Filtrasorb 400.
3. GAC = granular activated carbon.
4. LHHCWD = La Habra Heights County Water District.

- AV1240CB
- AV1240CB M
- AV1240LDX
- AV1240LDX M
- AV1240FPAS
- AV1240FPAS M
- F400
- F400 M
- Influent
- Water Volume Treated

	GSI Job No. 5302	Drawn By: GM
	Issued: 6-Oct-21	Chk'd By: MJ
	Revised:	Apr'd By: PEG
	Scale:	Figure 5

**PFOS GAC BREAKTHROUGH CURVES**  
PFAS Treatment Pilot Study  
Water Replenishment District of Southern California

## LHHCWD Well #10 - Perfluorooctanoic acid (PFOA) IX Samples



**Notes:**

1. "M" on treatment samples indicates mid-point sample (at one third of column bed length).
2. IX = ion exchange.
3. LHHCWD = La Habra Heights County Water District.

- PSR2 Plus
- PSR2 Plus M
- SIR-110-HP
- SIR-110-HP M
- PFA694E
- PFA694E M
- PFCR-2
- PFCR-2 M
- Influent
- Water Volume Treated

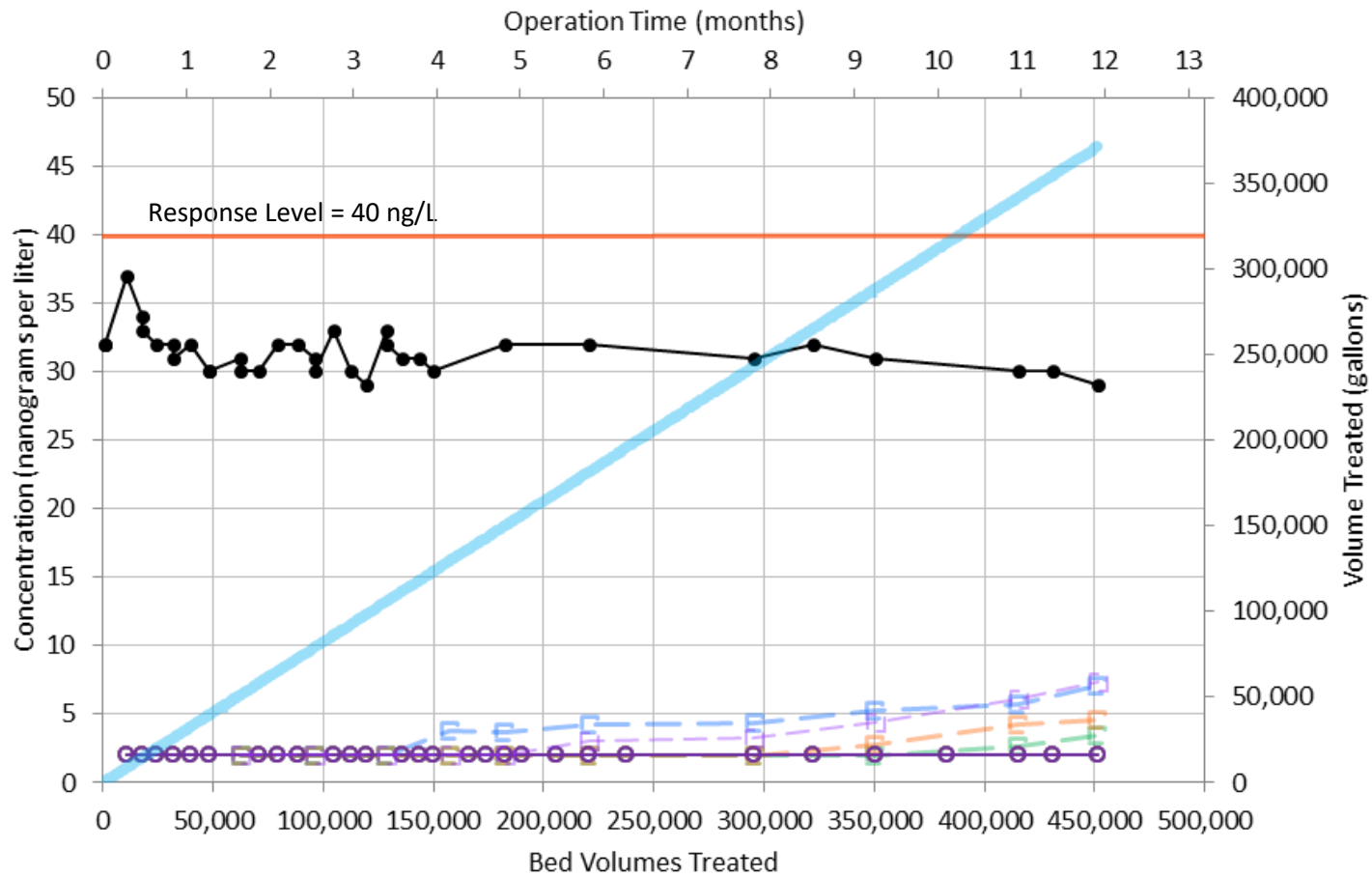


GSI Job No. 5302	Drawn By: GM
Issued: 6-Oct-21	Chk'd By: MJ
Revised:	Apr'd By: PEG
Scale:	Figure 6

**PFOA IX BREAKTHROUGH CURVES**  
 PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California



## LHHCWD Well #10 - Perfluorooctanesulfonic acid (PFOS) IX Samples



**Notes:**

1. "M" on treatment samples indicates mid-point sample (at one third of column bed length).
2. IX = ion exchange.
3. LHHCWD = La Habra Heights County Water District.

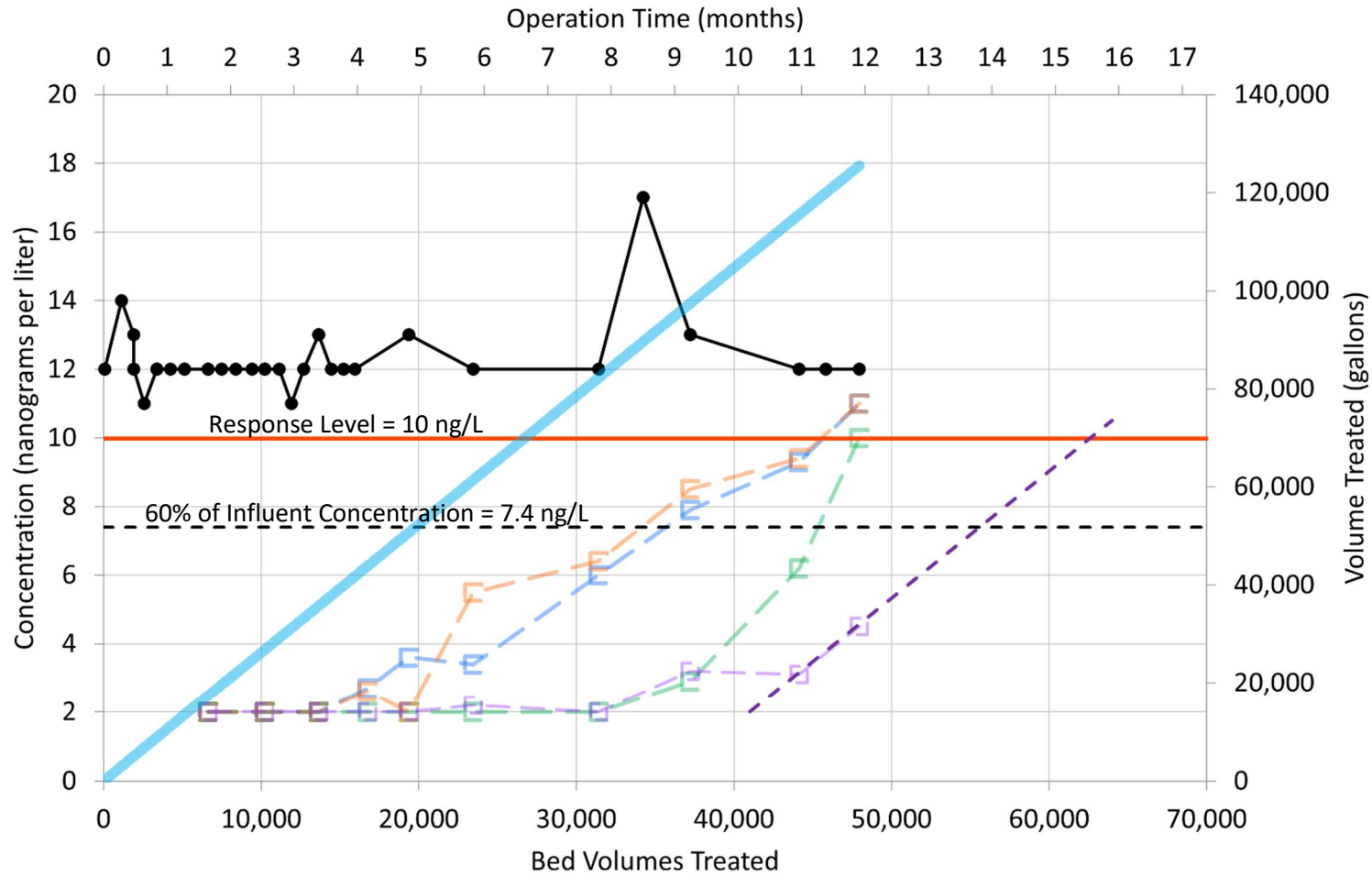
- PSR2 Plus
- PSR2 Plus M
- SIR-110-HP
- SIR-110-HP M
- PFA694E
- PFA694E M
- PFCR-2
- PFCR-2 M
- Influent
- Water Volume Treated



GSI Job No.	5302	Drawn By:	GM
Issued:	6-Oct-21	Chk'd By:	MJ
Revised:		Apr'd By:	PEG
Scale:		Figure 7	

**PFOS IX BREAKTHROUGH CURVES**  
 PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California

## LHHCWD Well #10 - Perfluorooctanoic acid (PFOA) GAC Samples



**Notes:**

1. "M" on treatment samples indicates mid-point sample (at one half of column bed length).
2. F400 = Filtrasorb 400; GAC = granular activated carbon.
3. ng/L = nanograms per liter.

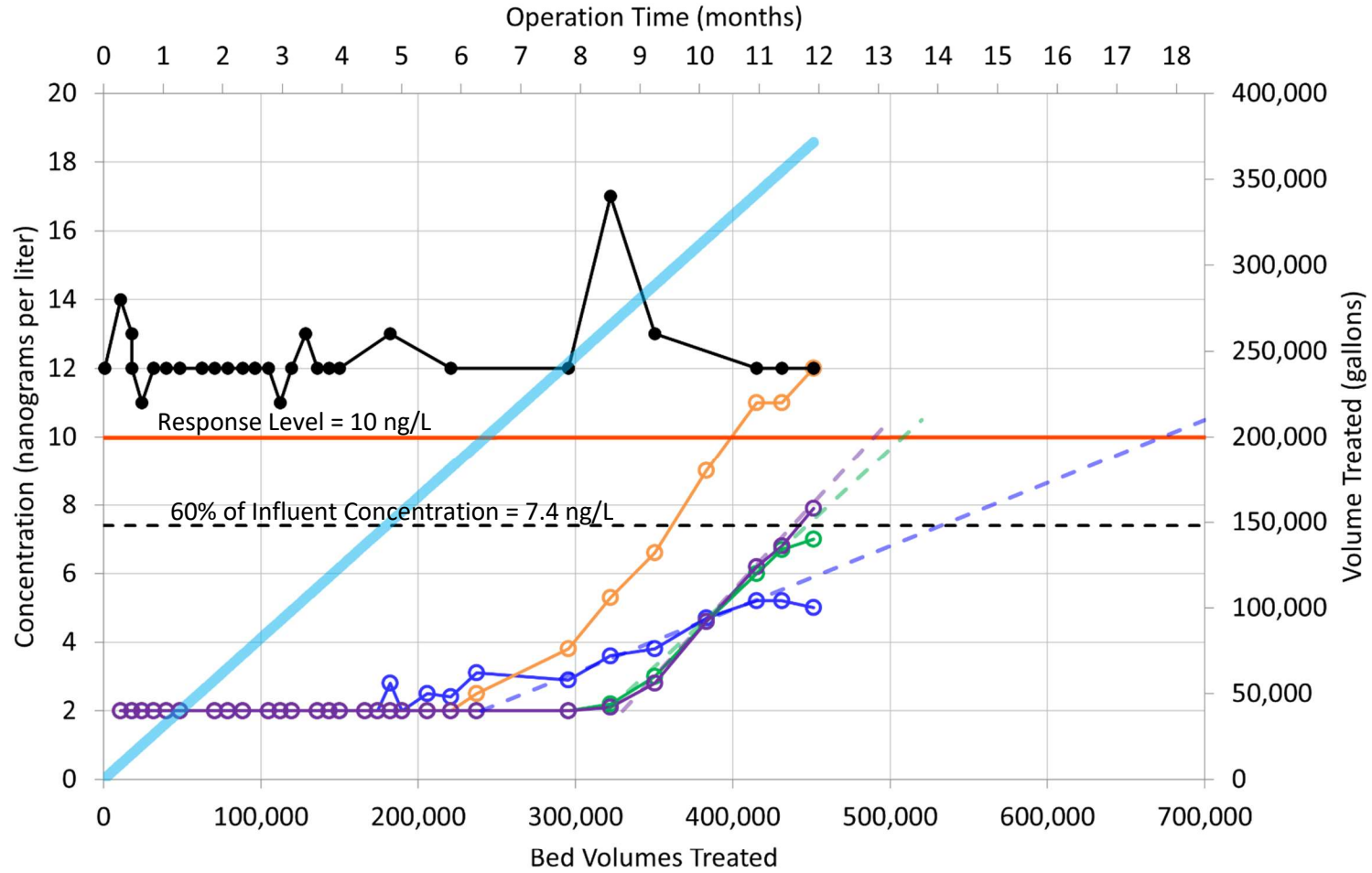
- AV1240CB M
- F400 M
- AV1240LDX M
- F400 M Estimated Breakthrough
- AV1240PFAS M
- Influent
- Water Volume Treated



GSI Job No.	5302	Drawn By:	GM
Issued:	6-Oct-21	Chk'd By:	MJ
Revised:		Aprn'd By:	PEG
Scale:		Figure 8	

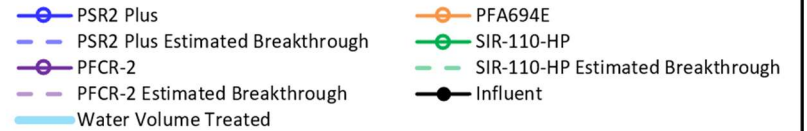
**GAC PFOA BREAKTHROUGH ESTIMATION CURVES**  
 PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California

## LHHCWD Well #10 - Perfluorooctanoic acid (PFOA) IX Samples



**Notes:**

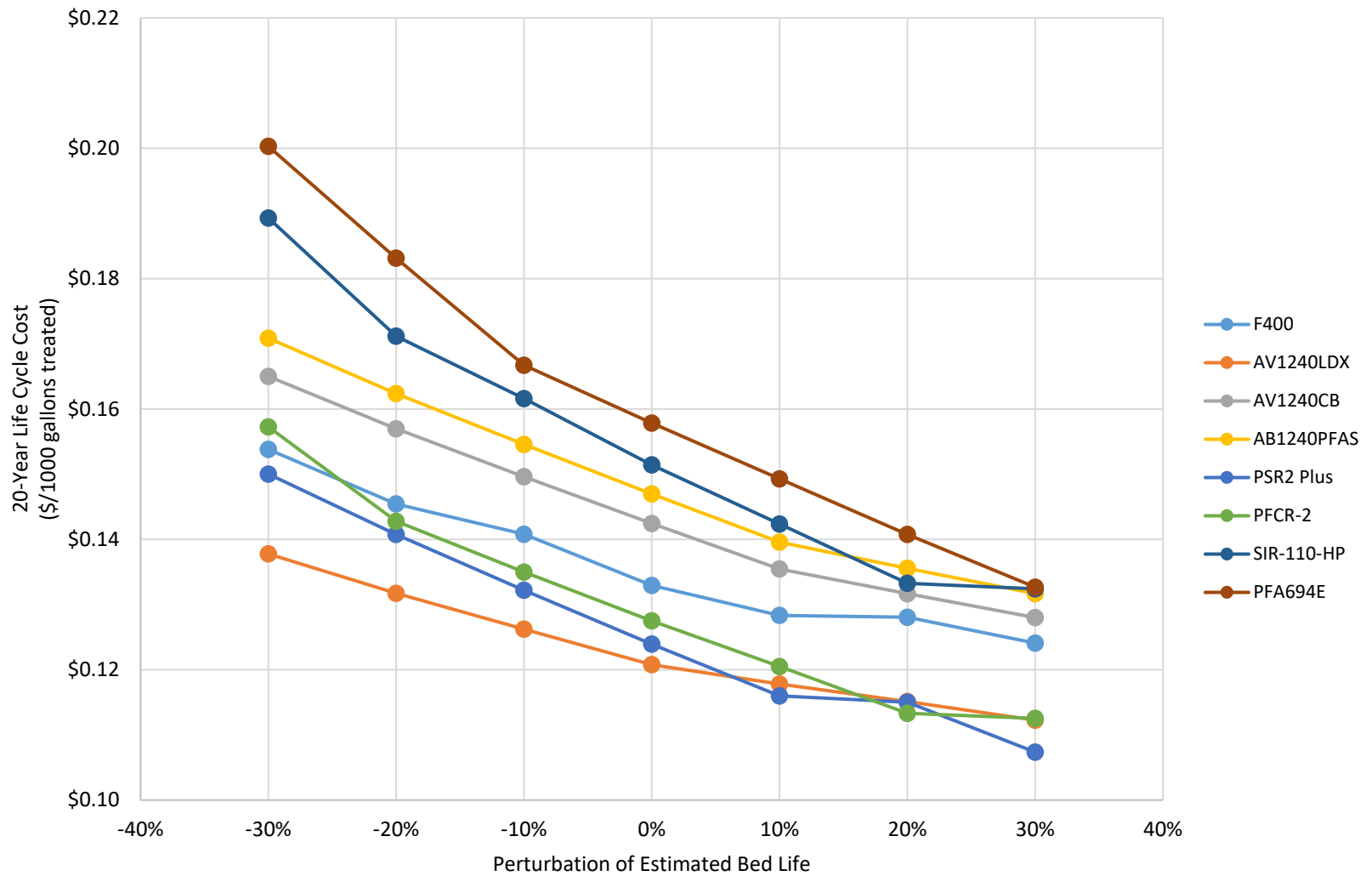
1. IX = ion exchange; ng/L = nanograms per liter.
2. LHHCWD = La Habra Heights County Water District.



GSI Job No.	5302	Drawn By:	GM
Issued:	6-Oct-21	Chk'd By:	MJ
Revised:		Apr'd By:	PEG
Scale:		Figure 9	

### IX PFOA BREAKTHROUGH ESTIMATION CURVES

PFAS Treatment Pilot Study  
Water Replenishment District of Southern California



Notes:  
 1. F400 = Filtrasorb 400.  
 2. LHHCCWD = La Habra Heights County Water District



GSI Job No.	5302	Drawn By:	GM
Issued:	6-Oct-2021	Chk'd By:	MJ
Revised:		Aprv'd By:	PEG
Scale:			Figure 10

**BED LIFE SENSITIVITY ANALYSIS**  
 PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California

**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED  
CARBON TO TREAT GROUNDWATER IMPACTED WITH  
PER- AND POLYFLUOROALKYL SUBSTANCES  
LA HABRA HEIGHTS COUNTY WATER DISTRICT – WATER SUPPLY WELL #10**

**Appendices**

**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED  
CARBON TO TREAT GROUNDWATER IMPACTED WITH  
PER- AND POLYFLUOROALKYL SUBSTANCES  
LA HABRA HEIGHTS COUNTY WATER DISTRICT – WATER SUPPLY WELL #10**

**Appendix A**

*Ion Exchange and Carbon Media Manufacturers' Specifications*



## AV 1240 Coal Base Granular Activated Carbon

### Application:

This activated carbon is made from bituminous coal. This type is mainly used for purification of ground water, well water, treating water for industrial water treatment, waste water treatment, decolorizing, deodorizing and recycling water systems. This Coal Base Activated Carbon meets NSF-61 for treatment of potable water and all municipal water treatment use.

### Specification:

		Test Methods
Mesh Size	12 x 40 Larger than #12, 5% max Smaller than #40, 4% max	ASTM D2862
Effective Size:	0.55-0.75 mm	
Uniformity Coefficient:	1.9 max	
Moisture Content	5% max	
Hardness	90% min	ASTM D3802
Abrasion Number	80	AWWA-B604
Iodine No.	900-1000 mg/gm	ASTM D4607
Density	0.46-0.54 g/cc	ASTM D2864

### Packaging:

Standard Packaging: 28 or 55 lb polypropylene bags, 200 lb fiber drums, and 1100 lb,. super sacks are available.

### Notes:

The above specification can be adjusted in accordance with the customer's requirements.



## AV1240 LDX Granular Activated Carbon

### Application:

AV1240 LDX is a virgin granular activated carbon produced from coal through a proprietary high-temperature activation process under stringent quality control.

- Designed for many liquid phase applications to remove small and large organic molecules such as color bodies, TOC, and other impurity compounds
- Well suited for removal of perfluoroalkyl substances such as PFOS and PFOA from water
- Applicable to glycerin decolorizing and purification
- High adsorption capacity
- Meets US Food Chemicals Codex (FCC) standards
- Certified to ANSI / NSF 61

### Specification:

		Test Methods
Mesh Size	12 x 40 Larger than #12, 5% max Smaller than #40, 5% max	ASTM D2862
Moisture Content	5% max	
Hardness	93% min	ASTM D3802
Abrasion Number	Min. 75	AWWA-B604
Iodine No.	Min 1000 mg/gm	ASTM D4607
Density	0.36-0.44 g/cc	ASTM D2864

### Packaging:

Standard packing is 44 lb. bags or 880 lb. bulk sacks.

### Notes:

The above specification can be adjusted in accordance with customer's requirements.





## AV1240 PFAS Granular Activated Carbon

### Application:

AV1240 PFAS is a granular activated carbon designed for treatment of drinking water in municipal applications. The manufacturing process used creates an activated carbon with enhanced properties making it ideal for the removal of contaminants including: disinfection byproduct precursors (DBPs), perfluorinated compounds (PFCs), pesticides, as well as naturally occurring organic matter and compounds affecting taste and odor. AV1240 PFAS is ANSI/NSF61 Certified.\*

### Specification:

		Test Methods
Mesh Size	12 x 40 Larger than #12, 5% max Smaller than #40, 4% max	ASTM D2862
Effective Size:	0.55-0.75 mm	
Uniformity Coefficient:	1.7 max	
Moisture Content	5% max	
Hardness	93% min	ASTM D3802
Abrasion Number	Min. 75	AWWA-B604
Iodine No.	Min 1000 mg/gm	ASTM D4607
Density	Min. 0.43 g/cc	ASTM D2864

### Packaging:

Standard Packaging: 55 lb polypropylene bags and 1100 lb., super sacks are available.

### Notes:

The above specification can be adjusted in accordance with the customer's requirements.

# FILTRASORB® 400

Granular Activated Carbon

## Applications



FILTRASORB 400 activated carbon can be used in a variety of liquid phase applications for the removal of dissolved organic compounds. FILTRASORB 400 has been successfully applied for over 40 years in applications such as drinking and process water purification, wastewater treatment, and food, pharmaceutical, and industrial purification.

## Description

FILTRASORB 400 is a granular activated carbon for the removal of dissolved organic compounds from water and wastewater as well as industrial and food processing streams. These contaminants include taste and odor compounds, organic color, total organic carbon (TOC), industrial organic compounds such as TCE and PCE, and PFAS.

This activated carbon is made from select grades of bituminous coal through a process known as reagglomeration to produce a high activity, durable, granular product capable of withstanding the abrasion associated with repeated backwashing, hydraulic transport, and reactivation for reuse. Activation is carefully controlled to produce a significant volume of both low and high energy pores for effective adsorption of a broad range of high and low molecular weight organic contaminants.

FILTRASORB 400 is formulated to comply with all the applicable provisions of the AWWA Standard for Granular Activated Carbon (B604) and Food Chemicals Codex. This product may also be certified to the requirements of ANSI/NSF Standard 61 for use in municipal water treatment facilities. Only products bearing the NSF Mark are certified to the NSF/ANSI 61 - Drinking Water System Components - Health Effects standard. Certified Products will bear the NSF Mark on packaging or documentation shipped with the product.

## Features / Benefits

- Produced from a pulverized blend of high quality bituminous coals resulting in a consistent, high quality product.
- Carbon granules are uniformly activated through the whole granule, not just the outside, resulting in excellent adsorption properties and constant adsorption kinetics.
- The reagglomerated structure ensures proper wetting while also eliminating floating material.
- High mechanical strength relative to other raw materials, thereby reducing the generation of fines during backwashing and hydraulic transport.
- Carbon bed segregation is retained after repeated backwashing, ensuring the adsorption profile remains unchanged and therefore maximizing the bed life.
- Reagglomerated with a high abrasion resistance, which provides excellent reactivation performance.
- High density carbon resulting in a greater adsorption capacity per unit volume.

## Specifications<sup>1</sup>

### FILTRASORB 400

Iodine Number, mg/g	1000 (min)
Moisture by Weight	2% (max)
Effective Size	0.55–0.75 mm
Uniformity Coefficient	1.9 (max)
Abrasion Number	75 (min)
Screen Size by Weight, US Sieve Series	
On 12 mesh	5% (max)
Through 40 mesh	4% (max)

<sup>1</sup>Calgon Carbon test method

## Typical Properties\*

### FILTRASORB 400

Apparent Density (tamped)	0.54 g/cc
Water Extractables	<1%
Non-Wetttable	<1%

\*For general information only, not to be used as purchase specifications.

## Safety Message

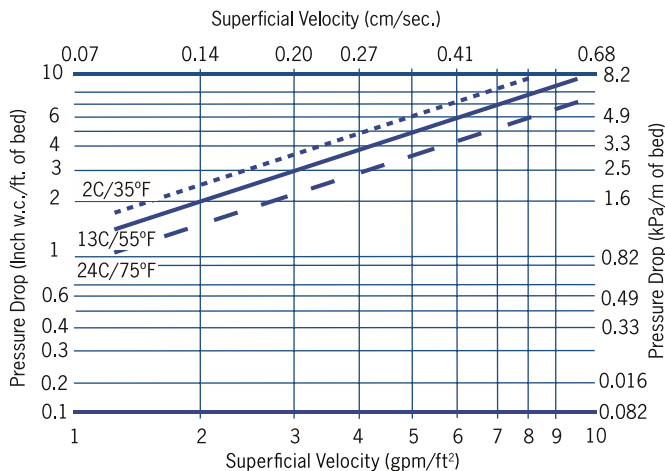
Wet activated carbon can deplete oxygen from air in enclosed spaces. If use in an enclosed space is required, procedures for work in an oxygen deficient environment should be followed.

1.800.4CARBON calgoncarbon.com

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DS-FILTRA40017-EIN-E1

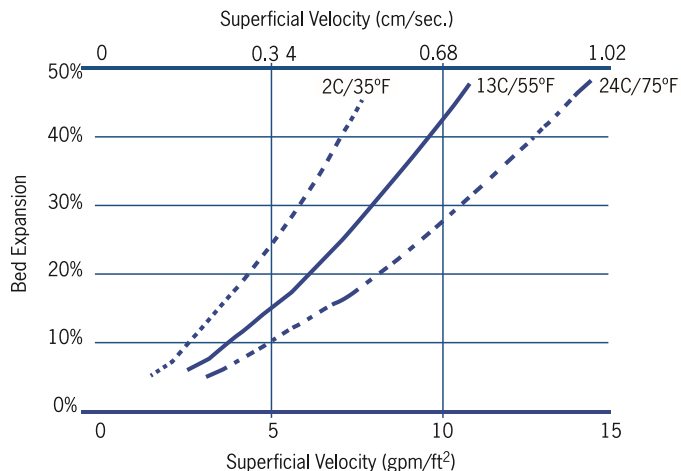
## Typical Pressure Drop

Based on a backwashed and segregated bed



## Typical Bed Expansion During Backwash

Based on a backwashed and segregated bed



## Design Considerations

FILTRASORB 400 activated carbon is typically applied in down-flow packed-bed operations using either pressure or gravity systems. Design considerations for a treatment system is based on the user's operating conditions, the treatment objectives desired, and the chemical nature of the compound(s) being adsorbed.

## Safety Message

Wet activated carbon can deplete oxygen from air in enclosed spaces. If use in an enclosed space is required, procedures for work in an oxygen deficient environment should be followed.

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DS-FILTRA40017-EIN-E1



## **DOWEX™ PSR2 Plus Cl Ion Exchange Resin**

For Selective Removal of Perchlorate from Potable Water

### **Description**

DOWEX™ PSR2 Plus Cl Ion Exchange Resin is a strong base anion exchange resin for the selective removal of perchlorate from potable water.

Designed to offer exceptional selectivity for perchlorate, the gel matrix also helps achieve high capacity while the uniform particle size (UPS) allows operation at lower pressure losses compared to conventional perchlorate removal resins.

### **Typical Physical and Chemical Properties**

Matrix	Styrene-divinylbenzene, gel
Type	Strong base anion
Physical Form	White to yellow spherical beads
Ionic Form as Shipped	Cl <sup>-</sup> Form
Total Exchange Capacity	≥ 0.7 eq/L
Water Retention Capacity	25 – 35%
Particle Size	
Particle Diameter <sup>b</sup>	700 ± 50 μm
Uniformity Coefficient	≤ 1.1
< 300 μm	1% max
Particle Density	1.07 g/mL
Bulk Density, as Shipped <sup>c</sup>	690 g/L (43 lb/ft <sup>3</sup> )

<sup>b</sup> For additional particle size information, please refer to the [Particle Size Distribution Cross Reference Chart](#) (Form No. 177-01775).

<sup>c</sup> As per the backwashed and settled density of the resin, determined by ASTM D-2187.

## Suggested Operating Conditions

Maximum Operating Temperature	60°C (140°F)
pH Range	0 – 14
Bed Depth, min.	1000 mm (3.1 ft)
Typical Service Flowrate	4 – 64 BV*/h (0.5 – 8 gpm/ft <sup>3</sup> )
Typical Linear Velocity	12 – 54 m/h (5 – 22 gpm/ft <sup>2</sup> )

\* 1 BV (Bed Volume) = 1 m<sup>3</sup> solution per m<sup>3</sup> resin or 7.5 gal per ft<sup>3</sup> resin

Please contact your Dow representative for system design and application testing details.

## Commissioning and Limits of Use

DOWEX™ PSR2 Plus CI Resin is suitable for use in potable water applications after an initial commissioning pretreatment at ambient temperature.

## Note

These resins may be subject to drinking water application restrictions in some countries.

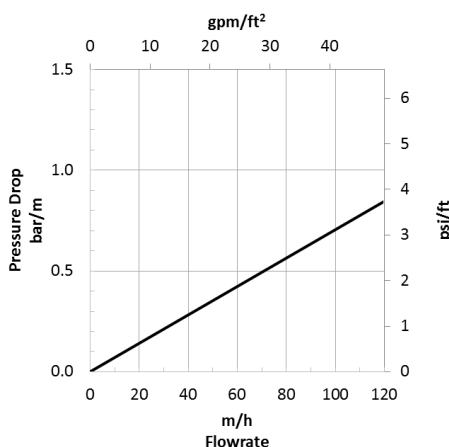
Please check the application status before use and sale.

## Hydraulic Characteristics

Pressure drop data for DOWEX™ PSR2 Plus CI Resin as a function of service flowrate at 20°C (68°F) is shown in Figure 1. The pressure drop for other water temperatures can be calculated with the provided equations. Pressure drop data are valid at the start of the service run with clean water and a correctly classified bed.

**Figure 1: Pressure Drop**

Temperature = 20°C (68°F)



**For other temperatures use:**

$$P_T = P_{20^\circ\text{C}} / (0.026 T_{\text{C}} + 0.48), \text{ where } P \equiv \text{bar/m}$$

$$P_T = P_{68^\circ\text{F}} / (0.014 T_{\text{F}} + 0.05), \text{ where } P \equiv \text{psi/ft}$$

## Packaging

- 5-ft<sup>3</sup> (0.14-m<sup>3</sup>) fiber drums
- 1000-L (264-gal) super sacks

## Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products—from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

## Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

### For more information, contact our Customer Information Group:

Asia Pacific	+86 21 3851 4988
Europe, Middle East, Africa	+31 115 672626
Latin America	+55 11 5184 8722
North America	1-800-447-4369

[www.dowwaterandprocess.com](http://www.dowwaterandprocess.com)

**WARNING:** Oxidizing agents such as nitric acid attack organic ion exchange resins under certain conditions. This could lead to anything from slight resin degradation to a violent exothermic reaction (explosion). Before using strong oxidizing agents, consult sources knowledgeable in handling such materials.

**NOTICE:** No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to "Dow" or the "Company" mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

All information set forth herein is for informational purposes only. This information is general information and may differ from that based on actual conditions. Please note that physical properties may vary depending on certain conditions and while operating conditions stated in this document are intended to lengthen product lifespan and/or improve product performance, it will ultimately depend on actual circumstances and is in no event a guarantee of achieving any specific results. Nothing in this document should be treated as a warranty by Dow.



RESINTECH SIR-110-HP is a chloride form PFAS, nitrate and perchlorate selective strong base anion resin. SIR-110-HP has unique functionality that greatly increases selectivity for nitrate while greatly decreasing the interference from sulfate ions. RESINTECH SIR-110-HP has the highest possible selectivity for perchlorate when compared to other similar resins. SIR-110-HP is intended for all perchlorate and PFAS removal applications, and where the highest possible affinity for nitrate is desired. SIR-110-HP is supplied in the chloride form.



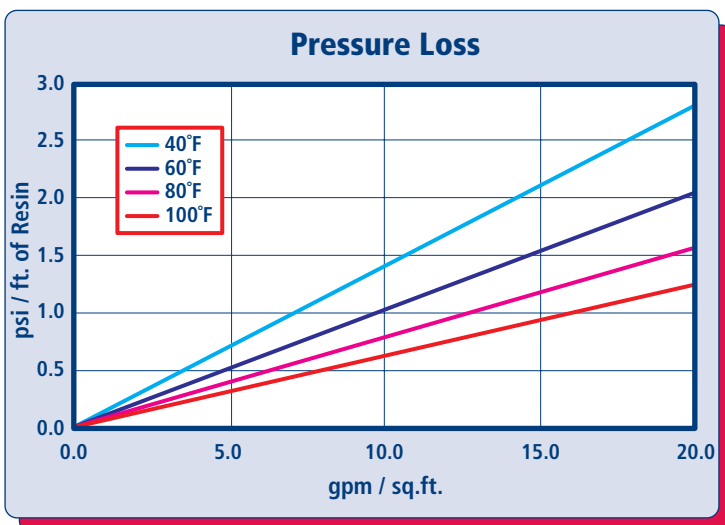
C US  
**NSF/ANSI-61 CERTIFIED FOR  
MATERIAL SAFETY**

## FEATURES & BENEFITS

- **HIGHEST OPERATING CAPACITY OF ANY PERCHLORATE AND PFAS SELECTIVE RESIN**  
Highly selective for perchlorate, PFAS and nitrate
- **LOW SULFATE SELECTIVITY**  
The unique functional group eliminates the possibility of nitrate dumping
- **SUPERIOR PHYSICAL STABILITY**  
90% plus sphericity and high crush strengths together with carefully controlled particle distribution provides long life and low pressure drop
- **CONTROLLED PARTICLE SIZE**  
16 to 50 mesh size provides a low pressure drop and superior kinetics

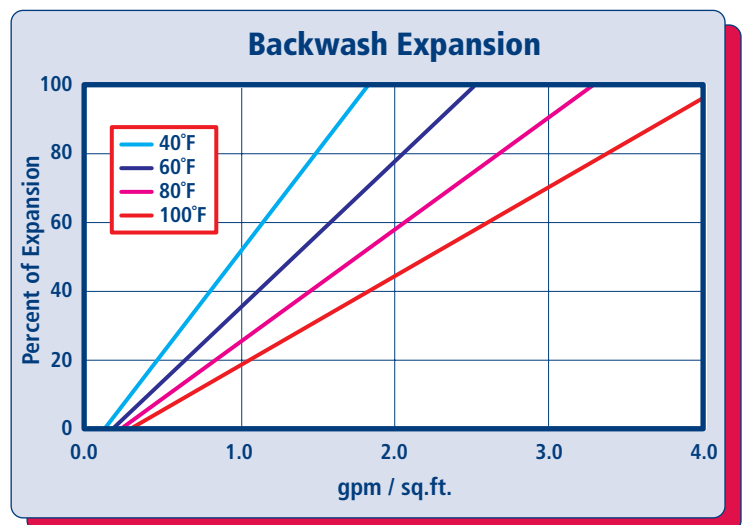
NSF/ANSI-61 compliance requires conditioning with a minimum 20 bed volume rinse prior to first use.

## HYDRAULIC PROPERTIES



### PRESSURE LOSS

The graph above shows the expected pressure loss of ResinTech SIR-110-HP per foot of bed depth as a function of flow rate at various temperatures.



### BACKWASH

The graph above shows the expansion characteristics of ResinTech SIR-110-HP as a function of flow rate at various temperatures.

# RESINTECH® SIR-110-HP

## PHYSICAL PROPERTIES

Polymer Structure	Styrene/DVB
Functional Group	Tributylamine
Physical Form	Spherical beads
Ionic Form as shipped	Chloride
Total Capacity Chloride form	>0.7 meq/mL
Water Retention Chloride form	38 to 50 percent
Approximate Shipping Weight Chloride form	41 lbs./cu.ft.
Screen Size Distribution (U.S. mesh)	20 to 50
Maximum Fines Content (<50 mesh)	1.5 percent
Minimum Sphericity	90 percent
Uniformity Coefficient	1.6 approx.
Resin Color	White to tan

Note: Physical properties can be certified on a per lot basis, available upon request

## SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature Chloride form	170°F
Minimum bed depth	24 inches
Backwash expansion	25 to 50 percent
Maximum pressure loss	20 psi
Operating pH range	4 to 10 SU
Regenerant Concentration Salt cycle	5 to 10 percent NaCl
Regenerant level	>10 lbs./cu.ft.
Regenerant flow rate	0.25 to 1.0 gpm/cu.ft.
Regenerant contact time	>30 minutes
Displacement flow rate	Same as dilution flow
Displacement volume	10 to 15 gallons/cu.ft.
Rinse flow rate	Same as service flow
Rinse volume	35 to 60 gallons/cu.ft.
Service flow rate	1 to 3 gpm/cu.ft.

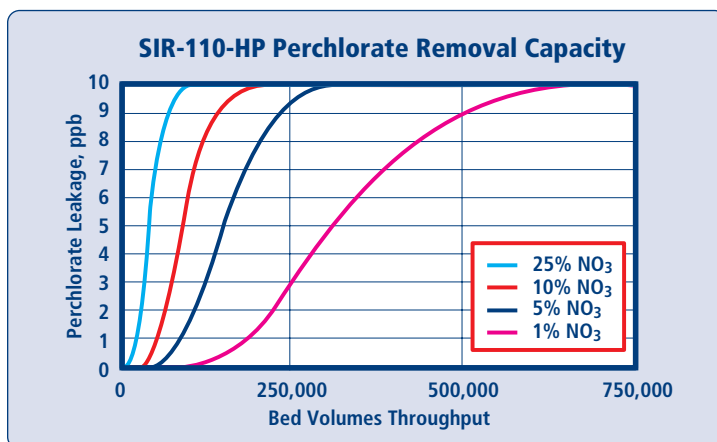
Note: These guidelines describe average low risk operating conditions. They are not intended to be absolute minimums or maximums.

For operation outside these guidelines, contact ResinTech Technical Support

## APPLICATIONS

### PFAS REMOVAL

ResinTech SIR-110-HP can be used for removal of various PFAS compounds, including PFOA and PFOS, from water. Testing has shown it can remove a wide range of other PFAS species in addition to these compounds. Ion exchange offers the benefit of reduced contact times and longer throughputs vs. conventional activated carbon treatment. An understanding of the influent water chemistry is needed for thorough review. Levels of TOC, VOC and individual PFAS compounds are needed in addition to the basic background water chemistry (chloride, sulfate, alkalinity, etc.). Any other contaminants that may be present are also needed to determine impact on PFAS removal (uranium, perchlorate, chromate, arsenic, etc.).



Capacity chart is based on waters with inlet conditions of 10 ppb ClO<sub>4</sub>, TDS less than 500 ppm, and is for perchlorate alone, exclusive of other anions. No engineering downgrade has been applied.

### PERCHLORATE REMOVAL

ResinTech SIR-110-HP is ideal for single use perchlorate removal applications and is a cost effective method to remove trace levels of perchlorate from water. The perchlorate ion is very strongly attracted to the ResinTech SIR-110-HP, so much so that regeneration is impractical or impossible. However, in most cases perchlorate loads to almost the full capacity of the resin, resulting in very long service life and eliminating the need to regenerate and re-use the spent resin.

### NITRATE REMOVAL

RESINTECH SIR-110-HP can be used in the chloride form to remove nitrates as well as perchlorates from potable water. SIR-110-HP has higher capacity for nitrate than SIR-100-HP in high TDS waters. When treating waters with high hardness the brine dilution and displacement waters should be softened and a low hardness salt used to prevent scaling. Regeneration, although possible, can be complicated, and may require special brining techniques or brine dosages.

**CAUTION: DO NOT MIX ION EXCHANGE RESIN WITH STRONG OXIDIZING AGENTS.** Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials, such as ion exchange resins.

**MATERIAL SAFETY DATA SHEETS (MSDS)** are available for all ResinTech Inc. products. To obtain a copy, contact your local ResinTech sales representative or our corporate headquarters. They contain important health and safety information. That information may be needed to protect your employees and customers from any known health and safety hazards associated with our products. We recommend that you secure and study the pertinent MSDS for our products and any other products being used. These suggestions and data are based on information we believe to be reliable. They are offered in good faith. However we do not make any guarantee or warranty. We caution against using these products in an unsafe manner or in violation of any patents; further we assume no liability for the consequences of any such actions.

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SIR-110-HP rev 1.4



## PRODUCT DATA SHEET

# Purofine® PFA694E

Polystyrenic Gel, Potable Water  
Grade

### PRINCIPAL APPLICATIONS

- Removal of perfluoroalkyl substances
- Removal of polyfluoroalkyl substances

### ADVANTAGES

- Very high operating capacity
- Excellent kinetics

### SYSTEMS

- Point of Use Systems (POU)
- Point of Entry Systems (POE)
- Municipal

### REGULATORY APPROVALS

- Certified by the WQA to NSF/ANSI-61 Standard

### TYPICAL PACKAGING

- 1 ft<sup>3</sup> Sack
- 25 L Sack
- 5 ft<sup>3</sup> Drum (Fiber)
- 1 m<sup>3</sup> Supersack
- 42 ft<sup>3</sup> Supersack

*\* Reduces PFAS to non-detect levels ranging from 1 – 5 parts per trillion*

### TYPICAL PHYSICAL & CHEMICAL CHARACTERISTICS:

Polymer Structure	Polystyrene crosslinked with divinylbenzene
Appearance	Spherical Beads
Functional Group	Complex Amino
Mean Diameter	675 ± 75 µm
Uniformity Coefficient (max.)	1.3
Specific Gravity	1.05
Shipping Weight (approx.)	650 - 700 g/L (40.6 - 43.8 lb/ft <sup>3</sup> )
Temperature Limit	100 °C (212.0 °F) (Cl <sup>-</sup> form)
Temperature Limit	60 °C (140.0 °F) (OH <sup>-</sup> form)



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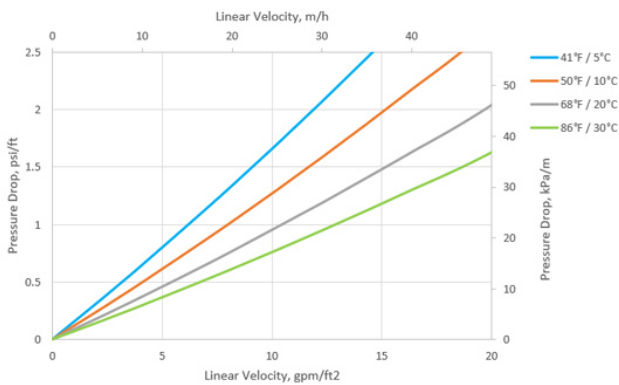
**Asia Pacific**  
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asiapacific@puro-lite.com

# Hydraulic Characteristics

## PRESSURE DROP

The pressure drop across a bed of ion exchange resin depends on the particle size distribution, bed depth, and voids volume of the exchange material, as well as on the flow rate and viscosity of the influent solution. Factors affecting any of these parameters—such as the presence of particulate matter filtered out by the bed, abnormal compressibility of the resin, or the incomplete classification of the bed—will have an adverse effect, and result in an increased head loss. Depending on the quality of the influent water, the application and the design of the plant, service flow rates may vary from 10 to 40 BV/h.

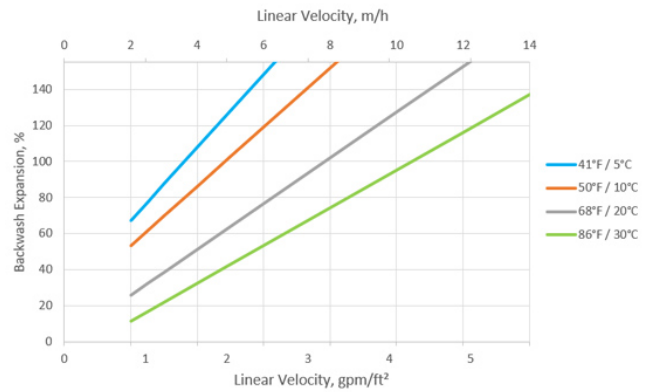
## PRESSURE DROP ACROSS RESIN BED



## BACKWASH

During up-flow backwash, the resin bed should be expanded in volume between 50 and 70% for at least 10 to 15 minutes. This operation will free particulate matter, clear the bed of bubbles and voids, and reclassify the resin particles ensuring minimum resistance to flow. When first putting into service, approximately 30 minutes of expansion is usually sufficient to properly classify the bed. It is important to note that bed expansion increases with flow rate and decreases with influent fluid temperature. Caution must be taken to avoid loss of resin through the top of the vessel by over expansion of the bed.

## BACKWASH EXPANSION OF RESIN BED



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 F +86 571 876 31385  
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# Resinex™ PFCR-2

## Selective PFOA/PFOS removal ion exchange resin

**Resinex™ PFCR-2** is a food grade, high purity, premium grade, strongly basic gel-type anion exchange resin, specially developed for selective perfluorinated compound removal from potable water in presence of high levels of sulphate. **Resinex™ PFCR-2** offers a superior operating capacity and an excellent selectivity to PFOA and PFOS compounds for economical treatment in co-flow and counter-flow systems. **Resinex™ PFCR-2** is implemented where the removal of monovalent ions are necessary. **Resinex™ PFCR-2** is also suitable for nitrate removal applications. This resin is suggested to be implemented as a one time use application and not suggested to be regenerated.

### Typical Properties

Type	Crosslinked polystyrene divinylbenzene
Form	gel, amber, spherical beads
Functional group	Tributylamine
Whole bead count	95% min.
Ionic form, as shipped	Cl <sup>-</sup>
Bead size	(≥ 95%) 0.30 - 1.25 mm (16x50 mesh)
Uniformity coefficient	1.70 max.
Bulk density, as shipped	650 - 700 kg/m <sup>3</sup>
Real density	1.00 - 1.10 g/cm <sup>3</sup>
Water retention	37 - 43%
Total capacity (Cl <sup>-</sup> form)	0.70 eq/l min.
Stability, temperature	100°C (Cl <sup>-</sup> Form) max.
Stability, pH	0 - 14

### Key Features and Benefits

- **High Integrity Beads**  
Excellent resistance to mechanical degradation ensures low pressure drop
- **High Selectivity To PFOA/PFOS**  
To comply with local legislation
- **High Operating Capacity**  
Economical advantage
- **Pretreated - Direct Usage In Cartridges**  
Point-of-entry and Point-of-use

### Typical Applications

- PFOA removal
- PFOS removal

### Standard Design Conditions

Bed depth	> 750 mm
Service flow rate	8 - 40 BV/h
Backwash expansion	50 - 75%

### Standard Packaging

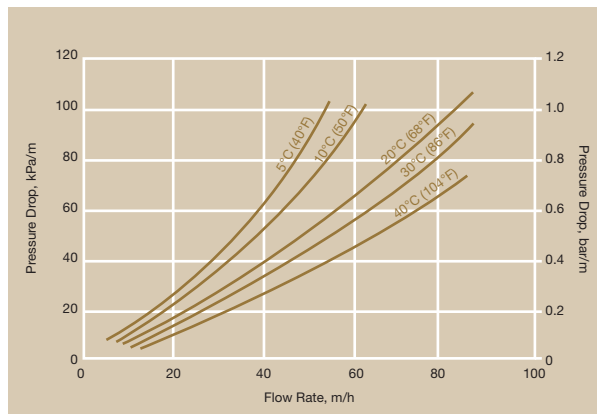
- 25 liter / 1 CFT PE valve bag
- 1000 litre bulk bag
- 2, 5 or 7 CFT drums



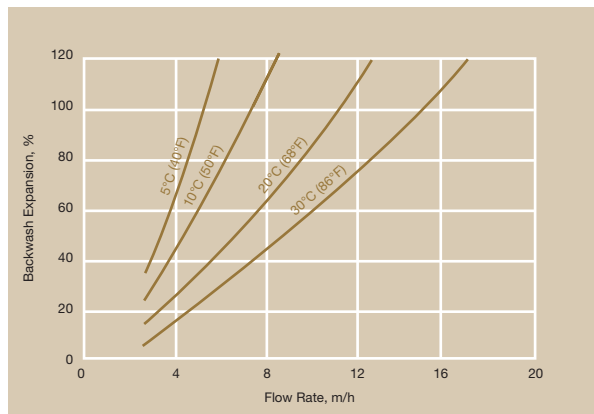
## Resinex™ PFCR-2

Selective PFOA/PFOS removal ion exchange resin

### Pressure Drop



### Backwash Expansion



### Standard Regeneration Parameters

Regeneration	Co-Flow
Concentration	5-10% NaCl
Level	150-200 g/l
Flow rate regenerant	4-6 BV/h
Contact time regenerant	30-60 min.
Flow rate rinse	2-6 BV/h
Rinse water required	2 BV

### Product Packing



25 lit. polyethylene valve bag  
48 bags per pallet



Polypropylene FIBCs  
(big bag), 1.000 lit.



**CAUTION** Strong oxidizing agents such as nitric acid can react violently with ion exchange resins and cause explosive type reactions. Before using strong oxidants, consult sources knowledgeable in the handling of these materials.



For more information or to contact Jacobi visit: [www.resinex-ixr.net](http://www.resinex-ixr.net)



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RX-PFCR2\_e\_Rev12\_20181208

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**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED  
CARBON TO TREAT GROUNDWATER IMPACTED WITH  
PER- AND POLYFLUOROALKYL SUBSTANCES  
LA HABRA HEIGHTS COUNTY WATER DISTRICT – WATER SUPPLY WELL #10**

**Appendix B**

*Pilot Test Photo Log*



Apr 17, 2020, Treatment skid following delivery to the site by AqueoUS Vets.

WRD Pilot Test Photo Log  
LHCWD Well #10

By: RDT

Project: 5302



Photo: 1 of 5



Apr 24, 2020, System started up and sampled.

WRD Pilot Test Photo Log  
LHCWD Well #10

By: RDT

Project: 5302



Photo: 2 of 5



June 9, 2020, Algae is observed for the first time in the PFA694E column.

WRD Pilot Test Photo Log  
LHCWD Well #10

By: RDT

Project: 5302



Photo: 3 of 5





June 30, 2020, Midpoint sample ports were installed. Note that foil was added to the top of the columns and flowmeters on June 23 so there was no water or media exposed to sunlight.

WRD Pilot Test Photo Log  
LHCWD Well #10

By: RDT

Project: 5302



Photo: 4 of 5



June 16, 2020, Algae is observed for the first time in a flowmeter, belonging to AV1240PFAS GAC.

WRD Pilot Test Photo Log  
LHCWD Well #10

By: RDT

Project: 5302



Photo: 5 of 5

**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED  
CARBON TO TREAT GROUNDWATER IMPACTED WITH  
PER- AND POLYFLUOROALKYL SUBSTANCES  
LA HABRA HEIGHTS COUNTY WATER DISTRICT – WATER SUPPLY WELL #10**

**Appendix C**

*Laboratory Reports*

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 866700  
Project: 0250000  
Group: WRD Pilot

\* Effective May 4, 2020 EEAM Lab is A2LA accredited for ISO/IEC 17025:2017.

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 866700  
 Project: 0250000  
 Sample Group: WRD Pilot

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **April 24, 2020 at 1624**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202004200247	MB-INF-20200424	04/24/2020 1400
	@537.1	
	Alkalinity in CaCO3 units	@ANIONS48
	Chloride	@VOASDWA
	Magnesium Total ICAP	Arsenic Total ICAP/MS
	Perchlorate	Hexavalent chromium(Dissolved)
	Sulfate	Manganese Total ICAP/MS
	Total Organic Carbon	Potassium Total ICAP
	Uranium ICAP/MS	Total Dissolved Solid (TDS)
		Total Suspended Solids (TSS)
		Calcium Total ICAP
		Iron Total ICAP
		Oil and Grease by 1664(subbed)
		Sodium Total ICAP
		Total Hardness as CaCO3 by ICP
		Uranium by ICPMS as pCi/L
202004200249	MB-INF-DUP-20200424	04/24/2020 1401
	Static ID: SET #2	
	@537.1	
202004200254	LH-INF-20200424	04/24/2020 1130
	@537.1	
	Alkalinity in CaCO3 units	@ANIONS48
	Chloride	@VOASDWA
	Magnesium Total ICAP	Arsenic Total ICAP/MS
	Perchlorate	Hexavalent chromium(Dissolved)
	Sulfate	Manganese Total ICAP/MS
	Total Organic Carbon	Potassium Total ICAP
	Uranium ICAP/MS	Total Dissolved Solid (TDS)
		Total Suspended Solids (TSS)
		Calcium Total ICAP
		Iron Total ICAP
		Oil and Grease by 1664(subbed)
		Sodium Total ICAP
		Total Hardness as CaCO3 by ICP
		Uranium by ICPMS as pCi/L
202004200255	LH-INF-DUP-20200424	04/24/2020 1131
	Static ID: SET A	
	@537.1	
202004200260	FB-1-HOLD-20200424	04/24/2020 1150
	Static ID: SET B	
	@537.1 FB	

### Test Description

@537.1 -- EPA Method 537.1

@537.1 FB -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

@VOASDWA -- Volatile Organics by GCMS

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 866700  
Project: 0250000  
Sample Group: WRD Pilot

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

---

The following samples were received from you on **April 24, 2020 at 1624**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

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Sample #	Sample ID	Sample Date
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CHAIN-OF-CUSTODY RECORD

Date: 4-24-2020 Page 1 of 1

866700

PROJECT NAME: WRD Pilot

PROJECT CONTACT: Miae Jeon

GLOBAL ID:

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070

PROJECT NO.: 5302

LAB CONTACT: Sophia Liang

SAMPLER(S): (PRINT)

TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com

LABORATORY: Eurofins Eaton Analytical

TURNAROUND TIME:  SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

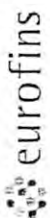
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	REQUESTED ANALYSES																						
		DATE	TIME						Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)	TOC (SM 5310C)	VOCs (EPA 524.2)											
	MB-INF-20200424	4-24	1400	Water	14	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
	MB-INF-DUP-20200424	4-24	1401	Water	2	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	LH-INF-20200424	4-24	1130	Water	14	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	LH-INF-DUP-20200424	4-24	1131	Water	2	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	FB-1-20200424	4-24	1150	Water	1	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Received by: (Signature) *[Signature]* Date: 4-24-2020 Time: 16:23

Received by: (Signature) *Charles Becker EHA* Date: 4-24-2020 Time: 16:24

Received by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_



Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 846700

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature ranges, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 6168 (Observation = 14.2 °C) (Corr. Factor = -0.2 °C) (Final = 14.0 °C)

TYPE OF ICE: Real  Synthetic  No Ice  CONDITION OF ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up  Walk-In  FedEx / UPS / DHL / Area Fast / Top Line / Other:

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 - (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)	2 - (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)
3 - (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)	4 - (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) VOA Headspace:  No Samples with Headspace:  Samples with Headspace (see below):   
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients: None/<6 mm />6mm

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: Chuck Brooks SIGNATURE      COMPANY/TITLE: Eurofins Eaton Analytical      DATE: 4.24.20      TIME: 1624

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Report:** 866700  
**Project:** 0250000  
**Group:** WRD Pilot

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---

**Folder Comments**

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove, CAELAP 2944 exp 9-30-2020

**Flags Legend:**

LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.

M1 - Matrix spike recovery was high; the associated blank spike recovery was acceptable.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 866700  
 Project: 0250000  
 Group: WRD Pilot

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/24/2020 1624

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202004200247</b>	<b><u>MB-INF-20200424</u></b>			
05/04/2020 18:25	Alkalinity in CaCO3 units		170		mg/L	2.0
04/28/2020 01:50	Arsenic Total ICAP/MS		1.3	10	ug/L	1.0
04/28/2020 13:05	Calcium Total ICAP		65		mg/L	1.0
04/24/2020 22:41	Chloride		54	250	mg/L	2.5
05/03/2020 16:35	Hexavalent chromium(Dissolved)		0.34		ug/L	0.020
04/28/2020 13:05	Iron Total ICAP		0.057	0.3	mg/L	0.020
04/28/2020 13:05	Magnesium Total ICAP		13		mg/L	0.10
04/28/2020 01:50	Manganese Total ICAP/MS		2.8	50	ug/L	2.0
04/24/2020 22:41	Nitrate as Nitrogen by IC		2.2	10	mg/L	0.50
04/24/2020 22:41	Nitrate as NO3 (calc)		9.9	45	mg/L	2.2
04/28/2020 21:45	Perfluorobutanesulfonic acid (PFBS)		0.0080		ug/L	0.0020
04/28/2020 21:45	Perfluoroheptanoic acid (PFHpA)		0.0026		ug/L	0.0020
04/28/2020 21:45	Perfluorohexanesulfonic acid (PFHxS)		0.0068		ug/L	0.0020
04/28/2020 21:45	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
04/28/2020 21:45	Perfluorononanoic acid (PFNA)		0.0033		ug/L	0.0020
04/28/2020 21:45	Perfluorooctanesulfonic acid (PFOS)		0.039		ug/L	0.0020
04/28/2020 21:45	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
04/28/2020 13:05	Potassium Total ICAP		3.9		mg/L	1.0
04/28/2020 13:05	Sodium Total ICAP		52		mg/L	1.0
04/24/2020 22:41	Sulfate		82	250	mg/L	2.5
04/30/2020 23:18	Total Dissolved Solids (TDS)		390	500	mg/L	10
04/28/2020 16:26	Total Hardness as CaCO3 by ICP (calc)		220		mg/L	3.0
04/24/2020 22:41	Total Nitrate, Nitrite-N, CALC		2.2		mg/L	0.10
04/28/2020 21:30	Total Organic Carbon		0.60		mg/L	0.30
04/28/2020 15:20	Uranium by ICPMS as pCi/L		1.5		pCi/L	0.70
04/28/2020 01:50	Uranium ICAP/MS		2.2	30	ug/L	1.0
		<b>202004200249</b>	<b><u>MB-INF-DUP-20200424</u></b>			
04/28/2020 21:55	Perfluorobutanesulfonic acid (PFBS)		0.0077		ug/L	0.0020
04/28/2020 21:55	Perfluorodecanoic acid (PFDA)		0.0020		ug/L	0.0020
04/28/2020 21:55	Perfluoroheptanoic acid (PFHpA)		0.0026		ug/L	0.0020
04/28/2020 21:55	Perfluorohexanesulfonic acid (PFHxS)		0.0072		ug/L	0.0020
04/28/2020 21:55	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
04/28/2020 21:55	Perfluorononanoic acid (PFNA)		0.0037		ug/L	0.0020
04/28/2020 21:55	Perfluorooctanesulfonic acid (PFOS)		0.040		ug/L	0.0020
04/28/2020 21:55	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

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 1 800 566 LABS (1 800 566 5227)

Report: 866700  
 Project: 0250000  
 Group: WRD Pilot

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/24/2020 1624

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202004200254</b>	<b><u>LH-INF-20200424</u></b>			
04/26/2020 23:22	2-Butanone (MEK)		5.8		ug/L	5.0
05/04/2020 18:07	Alkalinity in CaCO3 units		200		mg/L	2.0
04/28/2020 01:53	Arsenic Total ICAP/MS		2.6	10	ug/L	1.0
04/28/2020 13:03	Calcium Total ICAP		110		mg/L	1.0
04/24/2020 21:49	Chloride		100	250	mg/L	5.0
05/03/2020 16:05	Hexavalent chromium(Dissolved)		0.69		ug/L	0.020
04/28/2020 13:03	Magnesium Total ICAP		21		mg/L	0.10
04/24/2020 21:49	Nitrate as Nitrogen by IC		2.6	10	mg/L	1.0
04/24/2020 21:49	Nitrate as NO3 (calc)		12	45	mg/L	4.4
04/29/2020 09:24	Oil and Grease by 1664(subbed)		1.15		mg/L	0.96
04/28/2020 22:04	Perfluorobutanesulfonic acid (PFBS)		0.0060		ug/L	0.0020
04/28/2020 22:04	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
04/28/2020 22:04	Perfluorohexanoic acid (PFHxA)		0.0028		ug/L	0.0020
04/28/2020 22:04	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
04/28/2020 22:04	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
04/28/2020 22:04	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
04/28/2020 13:03	Potassium Total ICAP		4.5		mg/L	1.0
04/28/2020 13:03	Sodium Total ICAP		68		mg/L	1.0
04/24/2020 21:49	Sulfate		180	250	mg/L	5.0
04/30/2020 23:19	Total Dissolved Solids (TDS)		630	500	mg/L	10
04/28/2020 16:26	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
04/24/2020 21:49	Total Nitrate, Nitrite-N, CALC		2.6		mg/L	0.10
04/29/2020 07:17	Total Organic Carbon		0.57		mg/L	0.30
04/28/2020 15:20	Uranium by ICPMS as pCi/L		3.7		pCi/L	0.70
04/28/2020 01:53	Uranium ICAP/MS		5.5	30	ug/L	1.0
		<b>202004200255</b>	<b><u>LH-INF-DUP-20200424</u></b>			
04/28/2020 22:14	Perfluorobutanesulfonic acid (PFBS)		0.0059		ug/L	0.0020
04/28/2020 22:14	Perfluorohexanesulfonic acid (PFHxS)		0.0069		ug/L	0.0020
04/28/2020 22:14	Perfluorohexanoic acid (PFHxA)		0.0027		ug/L	0.0020
04/28/2020 22:14	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
04/28/2020 22:14	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
04/28/2020 22:14	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020

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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>MB-INF-20200424 (202004200247)</b>						<b>Sampled on 04/24/2020 1400</b>			
<b>EPA 200.8 - ICPMS Metals</b>									
04/26/20	04/28/20 01:50	1244559	1244761	(EPA 200.8)	Arsenic Total ICAP/MS	1.3	ug/L	1.0	1
04/26/20	04/28/20 01:50	1244559	1244761	(EPA 200.8)	Manganese Total ICAP/MS	2.8	ug/L	2.0	1
04/26/20	04/28/20 01:50	1244559	1244761	(EPA 200.8)	Uranium ICAP/MS	2.2	ug/L	1.0	1
<b>EPA 200.7 - ICP Metals</b>									
04/26/20	04/28/20 13:05	1244559	1244841	(EPA 200.7)	Calcium Total ICAP	65	mg/L	1.0	1
04/26/20	04/28/20 13:05	1244559	1244841	(EPA 200.7)	Iron Total ICAP	0.057	mg/L	0.020	1
04/26/20	04/28/20 13:05	1244559	1244841	(EPA 200.7)	Magnesium Total ICAP	13	mg/L	0.10	1
04/26/20	04/28/20 13:05	1244559	1244841	(EPA 200.7)	Potassium Total ICAP	3.9	mg/L	1.0	1
04/26/20	04/28/20 13:05	1244559	1244841	(EPA 200.7)	Sodium Total ICAP	52	mg/L	1.0	1
<b>SM 5310C - Total Organic Carbon</b>									
04/28/20	21:30		1244980	(SM 5310C)	Total Organic Carbon	0.60	mg/L	0.30	1
<b>EPA 200.8 - Uranium by ICPMS as pCi/L</b>									
04/28/20	15:20			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.5 (c)	pCi/L	0.70	1
<b>SM 2340B - Total Hardness as CaCO3 by ICP</b>									
04/28/20	16:26			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	220 (c)	mg/L	3.0	1
<b>EPA 218.6 - Hexavalent chromium(Dissolved)</b>									
05/03/20	16:35		1246143	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.34	ug/L	0.020	1
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>									
04/24/20	22:41		1244275	(EPA 300.0)	Nitrate as Nitrogen by IC	2.2	mg/L	0.50	5
04/24/20	22:41		1244275	(EPA 300.0)	Nitrate as NO3 (calc)	9.9	mg/L	2.2	5
04/24/20	22:41		1244275	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
04/24/20	22:41		1244275	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.2	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
04/24/20	22:41		1244657	(EPA 300.0)	Chloride	54	mg/L	2.5	5
04/24/20	22:41		1244657	(EPA 300.0)	Sulfate	82	mg/L	2.5	5
<b>EPA 314.0 - Perchlorate</b>									
04/28/20	17:18	(1)	1244835	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

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04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0080	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0026	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0068	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0033	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.039	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	13C2-PFDA	111	%		1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	13C2-PFHxA	106	%		1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	13C3-HFPO-DA	95	%		1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	d3-NMeFOSAA	96	%		1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	d5-NEtFOSAA	107	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	04/29/20 09:24			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.95	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (LM)	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1

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04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1

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04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,2-Dichloroethane-d4	105	%		1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	4-Bromofluorobenzene	95	%		1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Toluene-d8	96	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	05/04/20 18:25		1246155	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
04/30/20	04/30/20 23:18	1245720	1245726	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	390	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	04/30/20 21:06		1245711	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<b>MB-INF-DUP-20200424 (202004200249)</b>									
Static ID: SET #2									
<b>EPA 537.1 - EPA Method 537.1</b>									
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Sampled on 04/24/2020 1401

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 1 800 566 LABS (1 800 566 5227)

Report: 866700  
 Project: 0250000  
 Group: WRD Pilot

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/24/2020 1624

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0077	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0020	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0026	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0072	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0037	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.040	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	13C2-PFDA	111	%		1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	13C2-PFHxA	105	%		1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	13C3-HFPO-DA	93	%		1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	d3-NMeFOSAA	95	%		1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	d5-NEtFOSAA	110	%		1

**LH-INF-20200424 (202004200254)**

Sampled on 04/24/2020 1130

**EPA 200.8 - ICPMS Metals**

04/26/20	04/28/20 01:53	1244559	1244761	(EPA 200.8)	Arsenic Total ICAP/MS	2.6	ug/L	1.0	1
04/26/20	04/28/20 01:53	1244559	1244761	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
04/26/20	04/28/20 01:53	1244559	1244761	(EPA 200.8)	Uranium ICAP/MS	5.5	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

04/26/20	04/28/20 13:03	1244559	1244841	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
04/26/20	04/28/20 13:03	1244559	1244841	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
04/26/20	04/28/20 13:03	1244559	1244841	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
04/26/20	04/28/20 13:03	1244559	1244841	(EPA 200.7)	Potassium Total ICAP	4.5	mg/L	1.0	1
04/26/20	04/28/20 13:03	1244559	1244841	(EPA 200.7)	Sodium Total ICAP	68	mg/L	1.0	1

**SM 5310C - Total Organic Carbon**

	04/29/20 07:17		1244982	(SM 5310C)	Total Organic Carbon	0.57 (M1)	mg/L	0.30	1
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**EPA 200.8 - Uranium by ICPMS as pCi/L**

	04/28/20 15:20			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.7 (c)	pCi/L	0.70	1
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Report: 866700  
 Project: 0250000  
 Group: WRD Pilot

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/24/2020 1624

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>SM 2340B - Total Hardness as CaCO3 by ICP</b>									
	04/28/20 16:26			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
<b>EPA 218.6 - Hexavalent chromium(Dissolved)</b>									
	05/03/20 16:05		1246143	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.69	ug/L	0.020	1
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>									
	04/24/20 21:49		1244275	(EPA 300.0)	Nitrate as Nitrogen by IC	2.6	mg/L	1.0	10
	04/24/20 21:49		1244275	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	4.4	10
	04/24/20 21:49		1244275	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.12	10
	04/24/20 21:49		1244275	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.6	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	04/24/20 21:49		1244657	(EPA 300.0)	Chloride	100	mg/L	5.0	10
	04/24/20 21:49		1244657	(EPA 300.0)	Sulfate	180	mg/L	5.0	10
<b>EPA 314.0 - Perchlorate</b>									
	04/28/20 16:54		(1) 1244835	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0060	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0028	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	13C2-PFDA	111	%		1

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Report: 866700  
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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/24/2020 1624

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	13C2-PFHxA	109	%		1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	13C3-HFPO-DA	97	%		1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	d3-NMeFOSAA	93	%		1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	d5-NEtFOSAA	109	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	04/29/20 09:24			(EPA 1664)	Oil and Grease by 1664(subbed)	1.15	mg/L	0.96	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (LM)	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	2-Butanone (MEK)	5.8	ug/L	5.0	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1

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Samples Received on:  
 04/24/2020 1624

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 866700  
 Project: 0250000  
 Group: WRD Pilot

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/24/2020 1624

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,2-Dichloroethane-d4	108	%		1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	4-Bromofluorobenzene	96	%		1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Toluene-d8	93	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	05/04/20 18:07		1246155	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
04/30/20	04/30/20 23:19	1245720	1245726	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	630	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	04/30/20 21:07		1245711	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<b><u>LH-INF-DUP-20200424 (202004200255)</u></b>							<b>Sampled on 04/24/2020 1131</b>		
Static ID: SET A									
<b>EPA 537.1 - EPA Method 537.1</b>									
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0059	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0069	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0027	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	13C2-PFDA	109	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 866700  
 Project: 0250000  
 Group: WRD Pilot

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/24/2020 1624

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	13C2-PFHxA	106	%		1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	13C3-HFPO-DA	94	%		1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	d3-NMeFOSAA	95	%		1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	d5-NEtFOSAA	107	%		1

**FB-1-HOLD-20200424 (202004200260)**

Sampled on 04/24/2020 1150

Static ID: SET B

**EPA 537.1 - EPA Method 537.1**

04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	13C2-PFDA	105	%		1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	13C2-PFHxA	115	%		1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	13C3-HFPO-DA	106	%		1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	d3-NMeFOSAA	104	%		1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	d5-NEtFOSAA	106	%		1

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**Report:** 866700  
**Project:** 0250000  
**Group:** WRD Pilot

Water Replenishment District

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1244275**

202004200247 MB-INF-20200424  
 202004200254 LH-INF-20200424

**Analysis Date: 04/24/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1244657**

202004200247 MB-INF-20200424  
 202004200254 LH-INF-20200424

**Analysis Date: 04/24/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Volatile Organics by GCMS**

**Prep Batch: 1244639 Analytical Batch: 1244668**

202004200247 MB-INF-20200424  
 202004200254 LH-INF-20200424

**Analysis Date: 04/26/2020**

Analyzed by: TG9W  
 Analyzed by: TG9W

**ICPMS Metals**

**Prep Batch: 1244559 Analytical Batch: 1244761**

202004200247 MB-INF-20200424  
 202004200254 LH-INF-20200424

**Analysis Date: 04/28/2020**

Analyzed by: AZS  
 Analyzed by: AZS

**Perchlorate**

**Analytical Batch: 1244835**

202004200247 MB-INF-20200424  
 202004200254 LH-INF-20200424

**Analysis Date: 04/28/2020**

Analyzed by: H5VG  
 Analyzed by: H5VG

**ICP Metals**

**Prep Batch: 1244559 Analytical Batch: 1244841**

202004200247 MB-INF-20200424  
 202004200254 LH-INF-20200424

**Analysis Date: 04/28/2020**

Analyzed by: NINA  
 Analyzed by: NINA

**Total Organic Carbon**

**Analytical Batch: 1244980**

202004200247 MB-INF-20200424

**Analysis Date: 04/28/2020**

Analyzed by: ZS6I

**Total Organic Carbon**

**Analytical Batch: 1244982**

202004200254 LH-INF-20200424

**Analysis Date: 04/29/2020**

Analyzed by: ZS6I

**EPA Method 537.1**

**Prep Batch: 1244691 Analytical Batch: 1245239**

202004200247 MB-INF-20200424  
 202004200249 MB-INF-DUP-20200424  
 202004200254 LH-INF-20200424  
 202004200255 LH-INF-DUP-20200424

**Analysis Date: 04/28/2020**

Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ

**Total Suspended Solids (TSS)**

**Analytical Batch: 1245711**

202004200247 MB-INF-20200424  
 202004200254 LH-INF-20200424

**Analysis Date: 04/30/2020**

Analyzed by: TJ52  
 Analyzed by: TJ52



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**Report:** 866700  
**Project:** 0250000  
**Group:** WRD Pilot

Water Replenishment District

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**Total Dissolved Solids (TDS)**

**Prep Batch: 1245720 Analytical Batch: 1245726**

202004200247 MB-INF-20200424  
202004200254 LH-INF-20200424

**Analysis Date: 04/30/2020**

Analyzed by: TJ52  
Analyzed by: TJ52

**Hexavalent chromium(Dissolved)**

**Analytical Batch: 1246143**

202004200247 MB-INF-20200424  
202004200254 LH-INF-20200424

**Analysis Date: 05/03/2020**

Analyzed by: TLH  
Analyzed by: TLH

**EPA Method 537.1**

**Prep Batch: 1245600 Analytical Batch: 1246146**

202004200260 FB-1-HOLD-20200424

**Analysis Date: 05/04/2020**

Analyzed by: KAM

**Alkalinity in CaCO3 units**

**Analytical Batch: 1246155**

202004200247 MB-INF-20200424  
202004200254 LH-INF-20200424

**Analysis Date: 05/04/2020**

Analyzed by: ZB2Z  
Analyzed by: ZB2Z

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 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 866700  
 Project: 0250000  
 Group: WRD Pilot

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1244275</b>					<b>Analysis Date: 04/24/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.50	mg/L	100	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.52	mg/L	101	(90-110)	20	0.80
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0521	mg/L	104	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0122	mg/L	98	(50-150)		
MS_202004200254	Nitrate as Nitrogen by IC	2.6	13	16.1	mg/L	108	(80-120)		
MS_202004230209	Nitrate as Nitrogen by IC	0.42	6.5	6.88	mg/L	103	(80-120)		
MSD_202004200254	Nitrate as Nitrogen by IC	2.6	13	16.0	mg/L	107	(80-120)	20	0.66
MSD_202004230209	Nitrate as Nitrogen by IC	0.42	6.5	7.26	mg/L	109	(80-120)	20	5.3
LCS1	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0484	mg/L	97	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.00680	mg/L	54	(50-150)		
MS_202004200254	Nitrite Nitrogen by IC	ND	5	5.29	mg/L	106	(80-120)		
MS_202004230209	Nitrite Nitrogen by IC	ND	2.5	2.52	mg/L	101	(80-120)		
MSD_202004200254	Nitrite Nitrogen by IC	ND	5	5.26	mg/L	105	(80-120)	20	0.60
MSD_202004230209	Nitrite Nitrogen by IC	ND	2.5	2.58	mg/L	103	(80-120)	20	2.4
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1244657</b>					<b>Analysis Date: 04/24/2020</b>				
LCS1	Chloride		25	25.9	mg/L	104	(90-110)		
LCS2	Chloride		25	26.0	mg/L	104	(90-110)	20	0.39
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.455	mg/L	91	(50-150)		
MS_202004200254	Chloride	100	130	247	mg/L	115	(80-120)		
MS_202004230209	Chloride	88	65	155	mg/L	107	(80-120)		
MSD_202004200254	Chloride	100	130	246	mg/L	114	(80-120)	20	0.39
MSD_202004230209	Chloride	88	65	159	mg/L	114	(80-120)	20	2.4
LCS1	Sulfate		50	51.2	mg/L	102	(90-110)		
LCS2	Sulfate		50	51.2	mg/L	102	(90-110)	20	0.0
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.989	mg/L	99	(50-150)		
MRL_W	Sulfate		0.25	0.249	mg/L	100	(50-150)		
MS_202004200254	Sulfate	180	250	458	mg/L	111	(80-120)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 866700  
 Project: 0250000  
 Group: WRD Pilot

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202004230209	Sulfate	220	125	351	mg/L	103	(80-120)		
MSD_202004200254	Sulfate	180	250	456	mg/L	110	(80-120)	20	0.55
MSD_202004230209	Sulfate	220	125	359	mg/L	110	(80-120)	20	2.3

Volatile Organics by GCMS by EPA 524.2

Analytical Batch: 1244668

Analysis Date: 04/26/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	1,1,1,2-Tetrachloroethane		5	5.41	ug/L	108	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	5.14	ug/L	103	(70-130)	20	5.1
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.440	ug/L	88	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.86	ug/L	97	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.94	ug/L	99	(70-130)	20	1.6
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.22	ug/L	104	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	5.16	ug/L	103	(70-130)	20	1.2
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,1,2-Trichloroethane		5	5.09	ug/L	102	(70-130)		
LCS2	1,1,2-Trichloroethane		5	5.05	ug/L	101	(70-130)	20	0.79
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,1-Dichloroethane		5	4.80	ug/L	96	(70-130)		
LCS2	1,1-Dichloroethane		5	4.90	ug/L	98	(70-130)	20	2.1
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1-Dichloroethylene		5	4.85	ug/L	97	(70-130)		
LCS2	1,1-Dichloroethylene		5	4.85	ug/L	97	(70-130)	20	0.0
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,1-Dichloropropene		5	4.85	ug/L	97	(70-130)		
LCS2	1,1-Dichloropropene		5	5.01	ug/L	100	(70-130)	20	3.3
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	5.62	ug/L	112	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	5.27	ug/L	105	(70-130)	20	6.4
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.760	ug/L	<b>152</b>	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	1,2,3-Trichloropropane		5	5.29	ug/L	106	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.22	ug/L	104	(70-130)	20	1.3
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	5.33	ug/L	107	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	5.11	ug/L	102	(70-130)	20	4.2
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.690	ug/L	138	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	5.18	ug/L	104	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	5.08	ug/L	102	(70-130)	20	2.0
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,2-Dichloroethane		5	4.95	ug/L	99	(70-130)		
LCS2	1,2-Dichloroethane		5	4.92	ug/L	98	(70-130)	20	0.61
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	99.6	%	100	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			108	%	108	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	108	%	108	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	110	%	110	(70-130)		
LCS1	1,2-Dichloropropane		5	5.02	ug/L	100	(70-130)		
LCS2	1,2-Dichloropropane		5	5.02	ug/L	100	(70-130)	20	0.0
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	5.16	ug/L	103	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	5.10	ug/L	102	(70-130)	20	1.2
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	1,3-Dichloropropane		5	5.15	ug/L	103	(70-130)		
LCS2	1,3-Dichloropropane		5	5.01	ug/L	100	(70-130)	20	2.8
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.450	ug/L	90	(50-150)		
LCS1	2,2-Dichloropropane		5	5.27	ug/L	105	(70-130)		
LCS2	2,2-Dichloropropane		5	5.24	ug/L	105	(70-130)	20	0.57
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.500	ug/L	100	(50-150)		
LCS1	2-Butanone (MEK)		50	48.7	ug/L	97	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	2-Butanone (MEK)		50	47.9	ug/L	96	(70-130)	20	1.7
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.16	ug/L	103	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	102	%	102	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	98.4	%	98	(70-130)		
MBLK	4-Bromofluorobenzene (S)			91.8	%	92	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	95.4	%	95	(70-130)		
MRLW	4-Bromofluorobenzene (S)		5	91.2	%	91	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	53.4	ug/L	107	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	51.5	ug/L	103	(70-130)	20	3.6
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.72	ug/L	94	(50-150)		
LCS1	Benzene		5	4.92	ug/L	98	(70-130)		
LCS2	Benzene		5	4.87	ug/L	97	(70-130)	20	1.0
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Bromobenzene		5	4.89	ug/L	98	(70-130)		
LCS2	Bromobenzene		5	4.84	ug/L	97	(70-130)	20	1.0
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	Bromochloromethane		5	4.75	ug/L	95	(70-130)		
LCS2	Bromochloromethane		5	4.82	ug/L	96	(70-130)	20	1.5
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Bromodichloromethane		5	4.80	ug/L	96	(70-130)		
LCS2	Bromodichloromethane		5	4.70	ug/L	94	(70-130)	20	2.1
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.420	ug/L	84	(50-150)		
LCS1	Bromoethane		5	4.90	ug/L	98	(70-130)		
LCS2	Bromoethane		5	5.09	ug/L	102	(70-130)	20	3.8
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	Bromoform		5	5.07	ug/L	101	(70-130)		
LCS2	Bromoform		5	5.05	ug/L	101	(70-130)	20	0.40
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.630	ug/L	126	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.00	ug/L	100	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.10	ug/L	102	(70-130)	20	2.0

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.590	ug/L	118	(50-150)		
LCS1	Carbon disulfide		5	4.95	ug/L	99	(70-130)		
LCS2	Carbon disulfide		5	4.98	ug/L	100	(70-130)	20	0.60
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.470	ug/L	94	(50-150)		
LCS1	Carbon Tetrachloride		5	4.81	ug/L	96	(70-130)		
LCS2	Carbon Tetrachloride		5	4.93	ug/L	99	(70-130)	20	2.5
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.420	ug/L	84	(50-150)		
LCS1	Chlorobenzene		5	4.96	ug/L	99	(70-130)		
LCS2	Chlorobenzene		5	4.84	ug/L	97	(70-130)	20	2.5
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.450	ug/L	90	(50-150)		
LCS1	Chlorodibromomethane		5	5.10	ug/L	102	(70-130)		
LCS2	Chlorodibromomethane		5	5.04	ug/L	101	(70-130)	20	1.2
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	Chloroethane		5	4.72	ug/L	94	(70-130)		
LCS2	Chloroethane		5	4.54	ug/L	91	(70-130)	20	3.9
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.82	ug/L	96	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	4.77	ug/L	95	(70-130)	20	1.0
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.460	ug/L	92	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.55	ug/L	91	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.72	ug/L	94	(70-130)	20	3.7
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.530	ug/L	106	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.75	ug/L	95	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.69	ug/L	94	(70-130)	20	1.3
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.500	ug/L	100	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	5.22	ug/L	104	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	5.05	ug/L	101	(70-130)	20	3.3
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.410	ug/L	82	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Dibromomethane		5	4.87	ug/L	97	(70-130)		
LCS2	Dibromomethane		5	4.73	ug/L	95	(70-130)	20	2.9
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	Dichlorodifluoromethane		5	4.90	ug/L	98	(70-130)		
LCS2	Dichlorodifluoromethane		5	4.97	ug/L	99	(70-130)	20	1.4
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	Dichloromethane		5	4.78	ug/L	96	(70-130)		
LCS2	Dichloromethane		5	4.78	ug/L	96	(70-130)	20	0.0
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	Di-isopropyl ether		5	4.85	ug/L	97	(70-130)		
LCS2	Di-isopropyl ether		5	4.85	ug/L	97	(70-130)	20	0.0
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.540	ug/L	108	(50-150)		
LCS1	Ethyl benzene		5	5.00	ug/L	100	(70-130)		
LCS2	Ethyl benzene		5	5.02	ug/L	100	(70-130)	20	0.40
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	Hexachlorobutadiene		5	5.23	ug/L	105	(70-130)		
LCS2	Hexachlorobutadiene		5	5.09	ug/L	102	(70-130)	20	2.7
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.680	ug/L	136	(50-150)		
LCS1	Isopropylbenzene		5	5.07	ug/L	101	(70-130)		
LCS2	Isopropylbenzene		5	4.91	ug/L	98	(70-130)	20	3.2
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.400	ug/L	80	(50-150)		
LCS1	m,p-Xylenes		10	10.0	ug/L	100	(70-130)		
LCS2	m,p-Xylenes		10	10.1	ug/L	101	(70-130)	20	1
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.780	ug/L	78	(50-150)		
MRLLW	m,p-Xylenes		0.5	0.360	ug/L	72	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	5.07	ug/L	101	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	4.87	ug/L	97	(70-130)	20	4.0
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.450	ug/L	90	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	4.98	ug/L	100	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Methyl Tert-butyl ether (MTBE)		5	4.94	ug/L	99	(70-130)	20	0.81
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.570	ug/L	114	(50-150)		
LCS1	Naphthalene		5	6.48	ug/L	130	(70-130)		
LCS2	Naphthalene		5	6.25	ug/L	125	(70-130)	20	3.6
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.730	ug/L	146	(50-150)		
LCS1	n-Butylbenzene		5	5.37	ug/L	107	(70-130)		
LCS2	n-Butylbenzene		5	5.22	ug/L	104	(70-130)	20	2.8
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	n-Propylbenzene		5	5.22	ug/L	104	(70-130)		
LCS2	n-Propylbenzene		5	5.13	ug/L	103	(70-130)	20	1.7
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.450	ug/L	90	(50-150)		
LCS1	o-Chlorotoluene		5	4.98	ug/L	100	(70-130)		
LCS2	o-Chlorotoluene		5	4.95	ug/L	99	(70-130)	20	0.60
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.430	ug/L	86	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	5.38	ug/L	108	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	5.20	ug/L	104	(70-130)	20	3.4
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.480	ug/L	96	(50-150)		
LCS1	o-Xylene		5	5.15	ug/L	103	(70-130)		
LCS2	o-Xylene		5	5.11	ug/L	102	(70-130)	20	0.78
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.440	ug/L	88	(50-150)		
LCS1	p-Chlorotoluene		5	5.26	ug/L	105	(70-130)		
LCS2	p-Chlorotoluene		5	5.14	ug/L	103	(70-130)	20	2.3
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.450	ug/L	90	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	5.11	ug/L	102	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.08	ug/L	102	(70-130)	20	0.59
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.410	ug/L	82	(50-150)		
LCS1	p-Isopropyltoluene		5	5.25	ug/L	105	(70-130)		
LCS2	p-Isopropyltoluene		5	5.13	ug/L	103	(70-130)	20	2.3
MBLK	p-Isopropyltoluene			<0.5	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



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Report: 866700  
 Project: 0250000  
 Group: WRD Pilot

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	p-Isopropyltoluene		0.5	0.430	ug/L	86	(50-150)		
LCS1	sec-Butylbenzene		5	5.27	ug/L	105	(70-130)		
LCS2	sec-Butylbenzene		5	5.15	ug/L	103	(70-130)	20	2.3
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	Styrene		5	5.17	ug/L	103	(70-130)		
LCS2	Styrene		5	5.10	ug/L	102	(70-130)	20	1.4
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.410	ug/L	82	(50-150)		
LCS1	tert-amyl Methyl Ether		5	5.37	ug/L	107	(70-130)		
LCS2	tert-amyl Methyl Ether		5	5.21	ug/L	104	(70-130)	20	3.0
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.540	ug/L	108	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	5.43	ug/L	109	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	5.17	ug/L	103	(70-130)	20	4.9
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.520	ug/L	104	(50-150)		
LCS1	tert-Butylbenzene		5	5.11	ug/L	102	(70-130)		
LCS2	tert-Butylbenzene		5	5.01	ug/L	100	(70-130)	20	2.0
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	5.02	ug/L	100	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.86	ug/L	97	(70-130)	20	3.2
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.440	ug/L	88	(50-150)		
LCS1	Toluene		5	4.88	ug/L	98	(70-130)		
LCS2	Toluene		5	4.74	ug/L	95	(70-130)	20	2.9
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.460	ug/L	92	(50-150)		
LCS1	Toluene-d8 (S)		5	100	%	100	(70-130)		
LCS2	Toluene-d8 (S)		5	96.2	%	96	(70-130)		
MBLK	Toluene-d8 (S)			93.4	%	93	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	95.6	%	96	(70-130)		
MRLW	Toluene-d8 (S)		5	91.0	%	91	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.87	ug/L	97	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	4.77	ug/L	95	(70-130)	20	2.1
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.490	ug/L	98	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 866700  
 Project: 0250000  
 Group: WRD Pilot

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	trans-1,3-Dichloropropene		5	5.49	ug/L	110	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	5.18	ug/L	104	(70-130)	20	5.8
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.650	ug/L	130	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.88	ug/L	98	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.91	ug/L	98	(70-130)	20	0.61
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.440	ug/L	88	(50-150)		
LCS1	Trichlorofluoromethane		5	5.04	ug/L	101	(70-130)		
LCS2	Trichlorofluoromethane		5	5.00	ug/L	100	(70-130)	20	0.80
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	4.87	ug/L	97	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	4.82	ug/L	96	(70-130)	20	1.0
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.460	ug/L	92	(50-150)		
LCS1	Vinyl chloride (VC)		5	5.03	ug/L	101	(70-130)		
LCS2	Vinyl chloride (VC)		5	5.16	ug/L	103	(70-130)	20	2.5
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.490	ug/L	98	(50-150)		
MRLLW	Vinyl chloride (VC)		0.25	0.250	ug/L	100	(50-150)		

ICPMS Metals by EPA 200.8

Analytical Batch: 1244761

Analysis Date: 04/28/2020

LCS1	Arsenic Total ICAP/MS		50	46.4	ug/L	93	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	46.8	ug/L	94	(85-115)	20	0.64
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.04	ug/L	104	(50-150)		
MS_202004210157	Arsenic Total ICAP/MS	ND	50	49.1	ug/L	98	(70-130)		
MS2_202004230341	Arsenic Total ICAP/MS	7.9	50	53.5	ug/L	91	(70-130)		
MSD_202004210157	Arsenic Total ICAP/MS	ND	50	49.1	ug/L	98	(70-130)	20	0.043
MSD2_202004230341	Arsenic Total ICAP/MS	7.9	50	54.1	ug/L	93	(70-130)	20	1.1
LCS1	Manganese Total ICAP/MS		100	93.5	ug/L	94	(85-115)		
LCS2	Manganese Total ICAP/MS		100	95.4	ug/L	95	(85-115)	20	2.0
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.02	ug/L	101	(50-150)		
MS_202004210157	Manganese Total ICAP/MS	ND	100	94.4	ug/L	94	(70-130)		
MS2_202004230341	Manganese Total ICAP/MS	230	100	319	ug/L	86	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 866700  
 Project: 0250000  
 Group: WRD Pilot

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202004210157	Manganese Total ICAP/MS	ND	100	95.9	ug/L	96	(70-130)	20	1.5
MSD2_202004230341	Manganese Total ICAP/MS	230	100	317	ug/L	85	(70-130)	20	0.53
LCS1	Uranium ICAP/MS		50	46.4	ug/L	93	(85-115)		
LCS2	Uranium ICAP/MS		50	47.3	ug/L	95	(85-115)	20	1.9
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.930	ug/L	93	(50-150)		
MS_202004210157	Uranium ICAP/MS	2.5	50	51.7	ug/L	98	(70-130)		
MS2_202004230341	Uranium ICAP/MS	7.2	50	55.9	ug/L	97	(70-130)		
MSD_202004210157	Uranium ICAP/MS	2.5	50	52.7	ug/L	100	(70-130)	20	1.9
MSD2_202004230341	Uranium ICAP/MS	7.2	50	56.6	ug/L	99	(70-130)	20	1.2

Perchlorate by EPA 314.0

Analytical Batch: 1244835

Analysis Date: 04/28/2020

LCS1	Perchlorate		25	24.2	ug/L	97	(85-115)		
LCS2	Perchlorate		25	24.5	ug/L	98	(85-115)	15	1.2
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	3.89	ug/L	97	(75-125)		
MS_202003040003	Perchlorate	ND	25	23.2	ug/L	93	(80-120)		
MSD_202003040003	Perchlorate	ND	25	23.4	ug/L	94	(80-120)	15	1.1

ICP Metals by EPA 200.7

Analytical Batch: 1244841

Analysis Date: 04/28/2020

LCS1	Calcium Total ICAP		50	49.3	mg/L	99	(85-115)		
LCS2	Calcium Total ICAP		50	49.0	mg/L	98	(85-115)	20	0.41
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.968	mg/L	97	(50-150)		
MS_202004230379	Calcium Total ICAP	23	50	72.4	mg/L	99	(70-130)		
MS2_202004240095	Calcium Total ICAP	5.6	50	55.5	mg/L	100	(70-130)		
MSD_202004230379	Calcium Total ICAP	23	50	71.5	mg/L	97	(70-130)	20	1.3
MSD2_202004240095	Calcium Total ICAP	5.6	50	56.2	mg/L	101	(70-130)	20	1.2
LCS1	Iron Total ICAP		5	4.95	mg/L	99	(85-115)		
LCS2	Iron Total ICAP		5	4.92	mg/L	98	(85-115)	20	0.61
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0202	mg/L	101	(50-150)		
MS_202004230379	Iron Total ICAP	ND	5	5.04	mg/L	101	(70-130)		
MS2_202004240095	Iron Total ICAP	ND	5	4.96	mg/L	99	(70-130)		
MSD_202004230379	Iron Total ICAP	ND	5	5.00	mg/L	100	(70-130)	20	0.86
MSD2_202004240095	Iron Total ICAP	ND	5	5.03	mg/L	101	(70-130)	20	1.4
LCS1	Magnesium Total ICAP		20	19.5	mg/L	98	(85-115)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 866700  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Magnesium Total ICAP		20	19.4	mg/L	97	(85-115)	20	0.51
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0924	mg/L	92	(50-150)		
MS_202004230379	Magnesium Total ICAP	3.3	20	23.4	mg/L	101	(70-130)		
MS2_202004240095	Magnesium Total ICAP	1.8	20	21.7	mg/L	100	(70-130)		
MSD_202004230379	Magnesium Total ICAP	3.3	20	23.2	mg/L	100	(70-130)	20	0.77
MSD2_202004240095	Magnesium Total ICAP	1.8	20	21.9	mg/L	101	(70-130)	20	0.90
LCS1	Potassium Total ICAP		20	19.4	mg/L	97	(85-115)		
LCS2	Potassium Total ICAP		20	19.3	mg/L	97	(85-115)	20	0.52
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.521	mg/L	52	(50-150)		
MS_202004230379	Potassium Total ICAP	ND	20	20.0	mg/L	95	(70-130)		
MS2_202004240095	Potassium Total ICAP	2.8	20	21.4	mg/L	93	(70-130)		
MSD_202004230379	Potassium Total ICAP	ND	20	19.9	mg/L	95	(70-130)	20	0.52
MSD2_202004240095	Potassium Total ICAP	2.8	20	21.6	mg/L	95	(70-130)	20	1.6
LCS1	Sodium Total ICAP		50	48.4	mg/L	97	(85-115)		
LCS2	Sodium Total ICAP		50	48.3	mg/L	97	(85-115)	20	0.21
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.844	mg/L	84	(50-150)		
MS_202004230379	Sodium Total ICAP	19	50	67.5	mg/L	97	(70-130)		
MS2_202004240095	Sodium Total ICAP	13	50	61.1	mg/L	96	(70-130)		
MSD_202004230379	Sodium Total ICAP	19	50	67.1	mg/L	97	(70-130)	20	0.61
MSD2_202004240095	Sodium Total ICAP	13	50	61.8	mg/L	98	(70-130)	20	1.2

**Total Organic Carbon by SM 5310C**

**Analytical Batch: 1244980**

**Analysis Date: 04/28/2020**

LCS1	Total Organic Carbon		5	5.33	mg/L	107	(90-110)		
LCS2	Total Organic Carbon		5	5.27	mg/L	105	(90-110)	20	1.1
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.276	mg/L	138	(50-150)		
MS_202004200247	Total Organic Carbon	0.60	4	4.78	mg/L	105	(80-120)		
MS2_202004240248	Total Organic Carbon	3.0	2	5.26	mg/L	114	(80-120)		
MSD_202004200247	Total Organic Carbon	0.60	4	4.78	mg/L	104	(80-120)	20	0.021
MSD2_202004240248	Total Organic Carbon	3.0	2	5.25	mg/L	113	(80-120)	20	0.21

**Total Organic Carbon by SM 5310C**

**Analytical Batch: 1244982**

**Analysis Date: 04/29/2020**

LCS1	Total Organic Carbon		5	5.36	mg/L	107	(90-110)		
LCS2	Total Organic Carbon		5	5.22	mg/L	104	(90-110)	20	2.6

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 866700  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.289	mg/L	144	(50-150)		
MS_202004200254	Total Organic Carbon	0.57	4	4.85	mg/L	107	(80-120)		
MSD_202004200254	Total Organic Carbon	0.57	4	5.53	mg/L	<u>124</u>	(80-120)	20	13

EPA Method 537.1 by EPA 537.1

Prep Batch: 1244691 Analytical Batch: 1245239

Analysis Date: 04/28/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0232	ug/L	99	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0236	ug/L	100	(70-130)	30	1.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00162	ug/L	86	(50-150)		
MS2_202004240246	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0520	ug/L	110	(70-130)		
MSD2_202004240246	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0492	ug/L	104	(70-130)	30	5.5
LCS1	13C2-PFDA (S)		100	114	%	114	(70-130)		
LCS2	13C2-PFDA (S)		100	115	%	115	(70-130)		
MBLK	13C2-PFDA (S)			103	%	103	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	114	%	114	(70-130)		
MS2_202004240246	13C2-PFDA (S)		100	112	%	112	(70-130)		
MSD2_202004240246	13C2-PFDA (S)		100	120	%	120	(70-130)		
LCS1	13C2-PFHxA (S)		100	113	%	113	(70-130)		
LCS2	13C2-PFHxA (S)		100	113	%	113	(70-130)		
MBLK	13C2-PFHxA (S)			104	%	104	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	117	%	117	(70-130)		
MS2_202004240246	13C2-PFHxA (S)		100	115	%	115	(70-130)		
MSD2_202004240246	13C2-PFHxA (S)		100	122	%	122	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			103	%	103	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MS2_202004240246	13C2-PFOA- IS#1 (I)		100	98.7	%	99	(50-150)		
MSD2_202004240246	13C2-PFOA- IS#1 (I)		100	94.8	%	95	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	99.6	%	100	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MBLK	13C3-HFPO-DA (S)			92.0	%	92	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	100	%	100	(70-130)		
MS2_202004240246	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
MSD2_202004240246	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	96.2	%	96	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			96.4	%	96	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	94.8	%	95	(50-150)		
MS2_202004240246	13C4-PFOS- IS#2 (I)		100	92.0	%	92	(50-150)		
MSD2_202004240246	13C4-PFOS- IS#2 (I)		100	93.0	%	93	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0253	ug/L	107	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0260	ug/L	110	(70-130)	30	2.7
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00196	ug/L	104	(50-150)		
MS2_202004240246	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0502	ug/L	104	(70-130)		
MSD2_202004240246	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0506	ug/L	104	(70-130)	30	0.71
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0268	ug/L	115	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0264	ug/L	113	(70-130)	30	1.5
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00192	ug/L	103	(50-150)		
MS2_202004240246	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0545	ug/L	117	(70-130)		
MSD2_202004240246	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0510	ug/L	109	(70-130)	30	6.6
LCS1	d3-NMeFOSAA (I)		100	87.3	%	87	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	90.3	%	90	(50-150)		
MBLK	d3-NMeFOSAA (I)			92.2	%	92	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	91.1	%	91	(50-150)		
MS2_202004240246	d3-NMeFOSAA (I)		100	90.3	%	90	(50-150)		
MSD2_202004240246	d3-NMeFOSAA (I)		100	87.7	%	88	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	115	%	115	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
MBLK	d5-NEtFOSAA (S)			106	%	106	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	118	%	118	(70-130)		
MS2_202004240246	d5-NEtFOSAA (S)		100	103	%	103	(70-130)		
MSD2_202004240246	d5-NEtFOSAA (S)		100	108	%	108	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0243	ug/L	97	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0247	ug/L	99	(70-130)	30	1.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00187	ug/L	94	(50-150)		
MS2_202004240246	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0508	ug/L	102	(70-130)		
MSD2_202004240246	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0506	ug/L	101	(70-130)	30	0.49
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0294	ug/L	118	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0290	ug/L	116	(70-130)	30	1.4
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00221	ug/L	111	(50-150)		
MS2_202004240246	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0546	ug/L	109	(70-130)		
MSD2_202004240246	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0554	ug/L	111	(70-130)	30	1.5
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0290	ug/L	116	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0286	ug/L	114	(70-130)	30	1.7
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	106	(50-150)		
MS2_202004240246	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0545	ug/L	109	(70-130)		
MSD2_202004240246	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0525	ug/L	105	(70-130)	30	3.8
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0235	ug/L	106	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0212	ug/L	96	(70-130)	30	9.8
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00179	ug/L	101	(50-150)		
MS2_202004240246	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0496	ug/L	112	(70-130)		
MSD2_202004240246	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0463	ug/L	105	(70-130)	30	7.0
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0281	ug/L	112	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0289	ug/L	116	(70-130)	30	2.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00214	ug/L	107	(50-150)		
MS2_202004240246	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0552	ug/L	110	(70-130)		
MSD2_202004240246	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0556	ug/L	111	(70-130)	30	0.74
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0290	ug/L	116	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0300	ug/L	120	(70-130)	30	3.4
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00207	ug/L	104	(50-150)		
MS2_202004240246	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0592	ug/L	118	(70-130)		
MSD2_202004240246	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0592	ug/L	118	(70-130)	30	0.052
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0301	ug/L	120	(70-130)	30	6.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00230	ug/L	115	(50-150)		
MS2_202004240246	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0565	ug/L	113	(70-130)		
MSD2_202004240246	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0585	ug/L	117	(70-130)	30	3.5
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0277	ug/L	121	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0269	ug/L	118	(70-130)	30	2.9
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00207	ug/L	113	(50-150)		
MS2_202004240246	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0533	ug/L	117	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD2_202004240246	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0524	ug/L	115	(70-130)	30	1.5
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0273	ug/L	109	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0274	ug/L	110	(70-130)	30	0.37
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00210	ug/L	105	(50-150)		
MS2_202004240246	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0542	ug/L	108	(70-130)		
MSD2_202004240246	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0579	ug/L	116	(70-130)	30	6.5
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0289	ug/L	116	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0295	ug/L	118	(70-130)	30	2.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00228	ug/L	114	(50-150)		
MS2_202004240246	Perfluorononanoic acid (PFNA)	ND	0.05	0.0562	ug/L	112	(70-130)		
MSD2_202004240246	Perfluorononanoic acid (PFNA)	ND	0.05	0.0581	ug/L	116	(70-130)	30	3.2
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0271	ug/L	117	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0269	ug/L	116	(70-130)	30	0.74
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00210	ug/L	113	(50-150)		
MS2_202004240246	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0540	ug/L	117	(70-130)		
MSD2_202004240246	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0522	ug/L	113	(70-130)	30	3.5
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0297	ug/L	119	(70-130)	30	1.7
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00232	ug/L	116	(50-150)		
MS2_202004240246	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0562	ug/L	112	(70-130)		
MSD2_202004240246	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0584	ug/L	117	(70-130)	30	3.8
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0297	ug/L	119	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0308	ug/L	123	(70-130)	30	3.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00204	ug/L	102	(50-150)		
MS2_202004240246	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0598	ug/L	120	(70-130)		
MSD2_202004240246	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0596	ug/L	119	(70-130)	30	0.34
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0300	ug/L	120	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0314	ug/L	126	(70-130)	30	4.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00218	ug/L	109	(50-150)		
MS2_202004240246	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0614	ug/L	123	(70-130)		
MSD2_202004240246	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0599	ug/L	120	(70-130)	30	2.5
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0278	ug/L	111	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0288	ug/L	115	(70-130)	30	3.9
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00215	ug/L	108	(50-150)		
MS2_202004240246	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0547	ug/L	109	(70-130)		
MSD2_202004240246	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0571	ug/L	114	(70-130)	30	4.3

**Total Suspended Solids (TSS) by SM 2540D**

Analytical Batch: 1245711

Analysis Date: 04/30/2020

DUP_202003140026	Total Suspended Solids (TSS)	290		288	mg/L		(0-10)	10	2.1
DUP_202004270026	Total Suspended Solids (TSS)	280		306	mg/L		(0-10)	10	8.2
LCS1	Total Suspended Solids (TSS)		175	164	mg/L	94	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	168	mg/L	96	(71-107)	20	2.4
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	9.00	mg/L	90	(50-150)		

**Total Dissolved Solids (TDS) by E160.1/SM2540C**

Analytical Batch: 1245726

Analysis Date: 04/30/2020

DUP_202004230379	Total Dissolved Solid (TDS)	110		114	mg/L		(0-10)	10	0.0
DUP_202004240247	Total Dissolved Solid (TDS)	530		550	mg/L		(0-10)	10	3.7
LCS1	Total Dissolved Solid (TDS)		175	156	mg/L	89	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	672	mg/L	96	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	5.00	mg/L	50	(50-150)		

**Hexavalent chromium(Dissolved) by EPA 218.6**

Analytical Batch: 1246143

Analysis Date: 05/03/2020

LCS1	Hexavalent chromium(Dissolved)		2	2.05	ug/L	103	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	2.05	ug/L	103	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0187	ug/L	94	(50-150)		
MS_202004200254	Hexavalent chromium(Dissolved)	0.69	2	2.86	ug/L	108	(90-110)		
MS_202004280745	Hexavalent chromium(Dissolved)	0.031	2	2.18	ug/L	107	(90-110)		
MSD_202004200254	Hexavalent chromium(Dissolved)	0.69	2	2.84	ug/L	107	(90-110)	20	0.54
MSD_202004280745	Hexavalent chromium(Dissolved)	0.031	2	2.21	ug/L	109	(90-110)	20	1.6

**EPA Method 537.1 by EPA 537.1**

Prep Batch: 1245600 Analytical Batch: 1246146

Analysis Date: 05/04/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0520	ug/L	110	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0513	ug/L	109	(70-130)	30	1.4

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00198	ug/L	105	(50-150)		
MS2_202004290336	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0506	ug/L	107	(70-130)		
MSD2_202004290336	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0528	ug/L	112	(70-130)	30	4.5
LCS3	13C2-PFDA (S)		100	109	%	109	(70-130)		
LCS4	13C2-PFDA (S)		100	104	%	104	(70-130)		
MBLK	13C2-PFDA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	101	%	101	(70-130)		
MS2_202004290336	13C2-PFDA (S)		100	101	%	101	(70-130)		
MSD2_202004290336	13C2-PFDA (S)		100	103	%	103	(70-130)		
LCS3	13C2-PFHxA (S)		100	115	%	115	(70-130)		
LCS4	13C2-PFHxA (S)		100	111	%	111	(70-130)		
MBLK	13C2-PFHxA (S)			117	%	117	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	113	%	113	(70-130)		
MS2_202004290336	13C2-PFHxA (S)		100	114	%	114	(70-130)		
MSD2_202004290336	13C2-PFHxA (S)		100	112	%	112	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.7	%	99	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	98.3	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			99.8	%	100	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	99.6	%	100	(50-150)		
MS2_202004290336	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MSD2_202004290336	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	109	%	109	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MBLK	13C3-HFPO-DA (S)			106	%	106	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MS2_202004290336	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
MSD2_202004290336	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.5	%	100	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	98.2	%	98	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			98.0	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	95.9	%	96	(50-150)		
MS2_202004290336	13C4-PFOS- IS#2 (I)		100	99.9	%	100	(50-150)		
MSD2_202004290336	13C4-PFOS- IS#2 (I)		100	98.2	%	98	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0560	ug/L	116	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0538	ug/L	111	(70-130)	30	4.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00216	ug/L	114	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 866700  
 Project: 0250000  
 Group: WRD Pilot

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202004290336	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0526	ug/L	108	(70-130)		
MSD2_202004290336	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0531	ug/L	109	(70-130)	30	0.96
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0518	ug/L	111	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0503	ug/L	108	(70-130)	30	2.9
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00194	ug/L	104	(50-150)		
MS2_202004290336	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0494	ug/L	106	(70-130)		
MSD2_202004290336	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0510	ug/L	109	(70-130)	30	3.2
LCS3	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	95.8	%	96	(50-150)		
MBLK	d3-NMeFOSAA (I)			97.0	%	97	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	98.8	%	99	(50-150)		
MS2_202004290336	d3-NMeFOSAA (I)		100	98.2	%	98	(50-150)		
MSD2_202004290336	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	97.6	%	98	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	98.4	%	98	(70-130)		
MBLK	d5-NEtFOSAA (S)			101	%	101	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MS2_202004290336	d5-NEtFOSAA (S)		100	94.7	%	95	(70-130)		
MSD2_202004290336	d5-NEtFOSAA (S)		100	96.9	%	97	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0572	ug/L	114	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0559	ug/L	112	(70-130)	30	2.3
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00217	ug/L	108	(50-150)		
MS2_202004290336	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0543	ug/L	109	(70-130)		
MSD2_202004290336	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0535	ug/L	107	(70-130)	30	1.5
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0536	ug/L	107	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0536	ug/L	107	(70-130)	30	0.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00199	ug/L	100	(50-150)		
MS2_202004290336	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0521	ug/L	104	(70-130)		
MSD2_202004290336	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0525	ug/L	105	(70-130)	30	0.76
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0529	ug/L	106	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0527	ug/L	105	(70-130)	30	0.38
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	105	(50-150)		
MS2_202004290336	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0512	ug/L	102	(70-130)		
MSD2_202004290336	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0520	ug/L	104	(70-130)	30	1.6

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 866700  
 Project: 0250000  
 Group: WRD Pilot

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0491	ug/L	111	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0498	ug/L	112	(70-130)	30	1.4
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00190	ug/L	108	(50-150)		
MS2_202004290336	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0504	ug/L	113	(70-130)		
MSD2_202004290336	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0511	ug/L	115	(70-130)	30	1.5
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0565	ug/L	113	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0531	ug/L	106	(70-130)	30	6.2
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00207	ug/L	103	(50-150)		
MS2_202004290336	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0532	ug/L	106	(70-130)		
MSD2_202004290336	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0557	ug/L	111	(70-130)	30	4.6
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0597	ug/L	119	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0548	ug/L	110	(70-130)	30	8.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00211	ug/L	106	(50-150)		
MS2_202004290336	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0548	ug/L	110	(70-130)		
MSD2_202004290336	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0554	ug/L	111	(70-130)	30	0.99
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0607	ug/L	121	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0580	ug/L	116	(70-130)	30	4.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00224	ug/L	112	(50-150)		
MS2_202004290336	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0569	ug/L	114	(70-130)		
MSD2_202004290336	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0576	ug/L	115	(70-130)	30	1.2
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0517	ug/L	113	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0525	ug/L	115	(70-130)	30	1.5
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00211	ug/L	115	(50-150)		
MS2_202004290336	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0514	ug/L	113	(70-130)		
MSD2_202004290336	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0530	ug/L	116	(70-130)	30	3.1
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0588	ug/L	118	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0577	ug/L	115	(70-130)	30	1.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00235	ug/L	118	(50-150)		
MS2_202004290336	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0568	ug/L	113	(70-130)		
MSD2_202004290336	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0583	ug/L	116	(70-130)	30	2.6
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0560	ug/L	112	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0561	ug/L	112	(70-130)	30	0.18

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 866700  
 Project: 0250000  
 Group: WRD Pilot

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00229	ug/L	115	(50-150)		
MS2_202004290336	Perfluorononanoic acid (PFNA)	ND	0.05	0.0546	ug/L	109	(70-130)		
MSD2_202004290336	Perfluorononanoic acid (PFNA)	ND	0.05	0.0560	ug/L	112	(70-130)	30	2.5
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0514	ug/L	111	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0525	ug/L	113	(70-130)	30	2.1
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00199	ug/L	108	(50-150)		
MS2_202004290336	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0504	ug/L	108	(70-130)		
MSD2_202004290336	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0505	ug/L	109	(70-130)	30	0.25
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0575	ug/L	115	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0566	ug/L	113	(70-130)	30	1.6
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00227	ug/L	113	(50-150)		
MS2_202004290336	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0559	ug/L	111	(70-130)		
MSD2_202004290336	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0561	ug/L	112	(70-130)	30	0.36
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0617	ug/L	123	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0610	ug/L	122	(70-130)	30	1.1
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00249	ug/L	125	(50-150)		
MS2_202004290336	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0598	ug/L	119	(70-130)		
MSD2_202004290336	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0615	ug/L	123	(70-130)	30	2.7
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0577	ug/L	115	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0541	ug/L	108	(70-130)	30	6.4
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00215	ug/L	108	(50-150)		
MS2_202004290336	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0516	ug/L	103	(70-130)		
MSD2_202004290336	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0536	ug/L	107	(70-130)	30	3.8
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0553	ug/L	111	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0533	ug/L	107	(70-130)	30	3.7
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00206	ug/L	103	(50-150)		
MS2_202004290336	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0536	ug/L	107	(70-130)		
MSD2_202004290336	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0537	ug/L	107	(70-130)	30	0.19

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1246155

Analysis Date: 05/04/2020

LCS1	Alkalinity in CaCO3 units	100	98.9	mg/L	99	(90-110)
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Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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**Report:** 866700  
**Project:** 0250000  
**Group:** WRD Pilot

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Alkalinity in CaCO3 units		100	98.8	mg/L	99	(90-110)	20	0.10
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.88	mg/L	94	(50-150)		
MS_202004230173	Alkalinity in CaCO3 units	43	100	144	mg/L	101	(80-120)		
MS_202004230210	Alkalinity in CaCO3 units	150	100	172	mg/L	<u>25</u>	(80-120)		
MSD_202004230173	Alkalinity in CaCO3 units	43	100	145	mg/L	102	(80-120)	20	0.39
MSD_202004230210	Alkalinity in CaCO3 units	150	100	170	mg/L	<u>23</u>	(80-120)	20	0.93

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 05/12/2020

Quant Report - Page 1 of 1

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**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 05/12/2020

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**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 05/12/2020

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**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large), MPN/100 mL (Total Coliform, E. Coli), Presence/Absence (P/A)\* (Total Coliform, E. Coli)

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 05/12/2020

Quant Report - Page 1 of 1

Tel Fax

## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-26753-1  
Client Project/Site: 866700

**For:**

Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Monrovia, California 91016

Attn: Jaclyn Contreras



*Authorized for release by:  
5/1/2020 4:08:45 PM*

Lori Thompson, Project Manager I  
(714)895-5494  
[lorithompson@eurofinsus.com](mailto:lorithompson@eurofinsus.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 866700

Job ID: 570-26753-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 866700

Job ID: 570-26753-1

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**Job ID: 570-26753-1**

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**Laboratory: Eurofins Calscience LLC**

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**Narrative**

**Job Narrative**  
**570-26753-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 4/27/2020 11:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Eurofins Eaton Analytical  
Project/Site: 866700

Job ID: 570-26753-1

**Client Sample ID: 202004200247**

**Lab Sample ID: 570-26753-1**

No Detections.

**Client Sample ID: 202004200254**

**Lab Sample ID: 570-26753-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	1.15		0.962	0.770	mg/L	1		1664A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC



# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 866700

Job ID: 570-26753-1

## General Chemistry

Client Sample ID: 202004200247

Date Collected: 04/24/20 14:00

Date Received: 04/27/20 11:55

Lab Sample ID: 570-26753-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.955	0.764	mg/L		04/29/20 09:24	04/29/20 09:24	1

Client Sample ID: 202004200254

Date Collected: 04/24/20 11:30

Date Received: 04/27/20 11:55

Lab Sample ID: 570-26753-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	1.15		0.962	0.770	mg/L		04/29/20 09:24	04/29/20 09:24	1

# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 866700

Job ID: 570-26753-1

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 570-65948/1-A**  
**Matrix: Water**  
**Analysis Batch: 66061**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 65948**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		04/29/20 09:24	04/29/20 09:24	1

**Lab Sample ID: LCS 570-65948/2-A**  
**Matrix: Water**  
**Analysis Batch: 66061**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 65948**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	36.90		mg/L		92	78 - 114

**Lab Sample ID: LCSD 570-65948/3-A**  
**Matrix: Water**  
**Analysis Batch: 66061**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 65948**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	36.70		mg/L		92	78 - 114	1	18

**Lab Sample ID: 570-26621-B-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 66061**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 65948**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	ND		38.1	34.95		mg/L		92	78 - 114

**Lab Sample ID: 570-26621-B-1-B MSD**  
**Matrix: Water**  
**Analysis Batch: 66061**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 65948**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	ND		38.0	34.51		mg/L		91	78 - 114	1	18

# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 866700

Job ID: 570-26753-1

## General Chemistry

### Prep Batch: 65948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-26753-1	202004200247	Total/NA	Water	1664A	
570-26753-2	202004200254	Total/NA	Water	1664A	
MB 570-65948/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-65948/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-65948/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
570-26621-B-1-A MS	Matrix Spike	Total/NA	Water	1664A	
570-26621-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	1664A	

### Analysis Batch: 66061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-26753-1	202004200247	Total/NA	Water	1664A	65948
570-26753-2	202004200254	Total/NA	Water	1664A	65948
MB 570-65948/1-A	Method Blank	Total/NA	Water	1664A	65948
LCS 570-65948/2-A	Lab Control Sample	Total/NA	Water	1664A	65948
LCSD 570-65948/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	65948
570-26621-B-1-A MS	Matrix Spike	Total/NA	Water	1664A	65948
570-26621-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	1664A	65948

# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 866700

Job ID: 570-26753-1

**Client Sample ID: 202004200247**

**Lab Sample ID: 570-26753-1**

**Date Collected: 04/24/20 14:00**

**Matrix: Water**

**Date Received: 04/27/20 11:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1047 mL	1000 mL	65948	04/29/20 09:24	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			66061	04/29/20 09:24	UWEZ	ECL 1
Instrument ID: NOEQUIP										

**Client Sample ID: 202004200254**

**Lab Sample ID: 570-26753-2**

**Date Collected: 04/24/20 11:30**

**Matrix: Water**

**Date Received: 04/27/20 11:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1039 mL	1000 mL	65948	04/29/20 09:24	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			66061	04/29/20 09:24	UWEZ	ECL 1
Instrument ID: NOEQUIP										

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 866700

Job ID: 570-26753-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

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# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 866700

Job ID: 570-26753-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

**Protocol References:**

1664A = EPA-821-98-002

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 866700

Job ID: 570-26753-1

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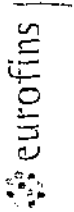
Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-26753-1	202004200247	Water	04/24/20 14:00	04/27/20 11:55	
570-26753-2	202004200254	Water	04/24/20 11:30	04/27/20 11:55	

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# INTERNAL CHAIN OF CUSTODY RECORD

INTERNAL FOLDER NUMBER: 846702

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASHA know. ASHA will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 6108 (Observation = 14.2 °C) (Corr. Factor = 0.2 °C) (Final = 14.0 °C)

TYPE OF ICE: Real  Synthetic  No Ice  CONDITION OF ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other:

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology sampling and temperature does not qualify, then measure the temperature of each quadrant and record each temperature of the quadrants

1 - (Observation) °C (Corr. Factor) °C (Final) °C	2 - (Observation) °C (Corr. Factor) °C (Final) °C
3 - (Observation) °C (Corr. Factor) °C (Final) °C	4 - (Observation) °C (Corr. Factor) °C (Final) °C

- 4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)
- 5) pH Check. Manufacturer: Lot Number: pH strip type: 0 - 14 or Expiration Date: Results:
- 6) Chlorine check. Manufacturer: Samsafe. Lot No.: Expiration Date: Results:

7) VOA Headspace:  No Samples with Headspace: Samples with Headspace (see below):

Headspace Documentation (use additional VOC internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251.552), 505, SPME, @CH, 532LCMS, 556, 536, Analoxin, LCOMS methods using 40 ml vials, international clients:

Sample ID	Bottle #	None/<6	>6min	Sample ID	Bottle #	None/<6	>6min

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors):

RECEIVED BY: Chuck Becker SIGNATURE: Chuck Becker COMPANY/STATE: EuroLins Eaton Analytical DATE: 4.24.20 TIME: 1624



### Submittal Form

Date: 4/30/2020

**\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!**  
Report & Invoice must have the Folder # 866700 Job # 1000014

Report all quality control data according to Method, include dates analyzed, Date extracted (if extracted), and Method reference on the report.  
Results must have Complete data & QC with Approval Signature.

**Ship To:**  
Eurofins CalScience  
7440 Lincoln Way  
Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

**Folder #:** 866700  
**Report Due:** 05/08/2020

**Reports:** Jackie Contreras Sub-Contracting Administrator  
EMAIL TO: us20\_subcontract@eurofinsus.com  
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
Phone (626) 386-1165 Fax (626) 386-1122  
Invoices to: Eurofins Eaton Analytical, LLC  
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix.  
Samples from: CALIFORNIA

<b>Sample ID</b> 202004200247	<b>Client Sample ID for reference onl</b> MB-INF-20200424	<b>Sample Date &amp; Time</b> 04/24/20 1400 DW	<b>Matrix</b> DW	<b>PWS Systemcode</b>	<b>PWSID</b> JLS
<b>Sample type:</b>	<b>Sample Event:</b>	<b>Facility ID:</b>	<b>Sample Point ID:</b>	<b>Static ID:</b>	

**Method** EPA 1664  
**Prep Method** Analysis Requested  
Oil and Grease by 1664(subbed)

<b>Sample ID</b> 202004200254	<b>Client Sample ID for reference onl</b> LH-INF-20200424	<b>Sample Date &amp; Time</b> 04/24/20 1130 DW	<b>Matrix</b> DW	<b>PWS Systemcode</b>	<b>PWSID</b> JLS
<b>Sample type:</b>	<b>Sample Event:</b>	<b>Facility ID:</b>	<b>Sample Point ID:</b>	<b>Static ID:</b>	

**Method** EPA 1664  
**Prep Method** Analysis Requested  
Oil and Grease by 1664(subbed)

Relinquished by: \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Received by: \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Received by: \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS  
An Acknowledgement of Receipt is requested to attn: Jackie Contreras

# Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-26753-1

**Login Number: 26753**

**List Number: 1**

**Creator: Andujo, Italy**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 869296  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 869296  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **May 05, 2020** at **1652**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202005050712	GAC-1-20200505 Static ID: 537.1 @537.1	05/05/2020 1230
202005050713	GAC-2-20200505 Static ID: 537.1 @537.1	05/05/2020 1233
202005050714	GAC-3-20200505 Static ID: 537.1 @537.1	05/05/2020 1236
202005050715	GAC-4-20200505 Static ID: 537.1 @537.1	05/05/2020 1239
202005050716	IX-1-20200505 Static ID: 537.1 @537.1	05/05/2020 1242
202005050717	IX-2-20200505 Static ID: 537.1 @537.1	05/05/2020 1245
202005050718	IX-3-20200505 Static ID: 537.1 @537.1	05/05/2020 1248
202005050719	IX-4-20200505 Static ID: 537.1 @537.1	05/05/2020 1251
202005050720	LH-INF-20200505 @537.1 Chloride Sulfate	05/05/2020 1254 Alkalinity in CaCO3 units Total Organic Carbon
202005050721	GAC-5-20200505 Static ID: 537.1 No Test	05/05/2020 1355
202005050722	GAC-6-20200505 Static ID: 537.1	05/05/2020 1358

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
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The following samples were received from you on **May 05, 2020** at **1652**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	No Test	
<u>202005050723</u>	GAC-7-20200505 Static ID: 537.1	05/05/2020 1401
	No Test	
<u>202005050724</u>	GAC-8-20200505 Static ID: 537.1	05/05/2020 1404
	No Test	
<u>202005050725</u>	IX-5-20200505 Static ID: 537.1	05/05/2020 1407
	No Test	
<u>202005050726</u>	IX-6-20200505 Static ID: 537.1	05/05/2020 1410
	No Test	
<u>202005050727</u>	IX-7-20200505 Static ID: 537.1	05/05/2020 1413
	No Test	
<u>202005050728</u>	IX-8-20200505 Static ID: 537.1	05/05/2020 1416
	No Test	
<u>202005050729</u>	MB-INF--20200505	05/05/2020 1419
	No Test	
<u>202005050730</u>	MB-INF-DUP-20200505 Static ID: 537.1	05/05/2020 1420
	No Test	
<u>202005050731</u>	FB-HOLD-20200505 @537.1 FB	05/05/2020 1425

#### Test Description

@537.1 -- EPA Method 537.1

@537.1 FB -- EPA Method 537.1



### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 869296  
Project: 0250000  
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

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The following samples were received from you on **May 05, 2020** at **1652**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

---

Sample #	Sample ID	Sample Date
	@ANIONS48 -- Nitrate, Nitrite by EPA 300.0	

809796

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302	
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang	
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) <u>RBT</u>	
LABORATORY: Eurofins Eaton Analytical		<b>REQUESTED ANALYSES</b>			
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		Please check box or fill in blank as needed.			
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results		Field Filtered	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
LAB USE ONLY	SAMPLE ID	DATE	SAMPLING TIME	MATRIX	NO. OF CONT.
	GAC-1-20200505	5-5	1230	Water	2
	GAC-2-20200505		1233	Water	2
	GAC-3-20200505		1236	Water	2
	GAC-4-20200505		1239	Water	2
	IX-1-20200505		1242	Water	2
	IX-2-20200505		1245	Water	2
	IX-3-20200505		1248	Water	2
	IX-4-20200505		1251	Water	2
	LH-INF-20200505		1254	Water	5
	<del>LH-INF-DUP</del>			Water	
	GAC-5-20200505		1356	Water	2
	GAC-6-20200505		1358	Water	2
	GAC-7-20200505		1401	Water	2
	GAC-8-20200505		1404	Water	2
Relinquished by: (Signature) <u>RBT</u>		Received by: (Signature) <u>[Signature]</u>		Date: <u>5-5-20</u> Time: <u>1652</u>	
Relinquished by: (Signature)		Received by: (Signature)		Date: _____ Time: _____	
Relinquished by: (Signature)		Received by: (Signature)		Date: _____ Time: _____	

*AG 9296*

<p>FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070</p> <p>TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com</p> <p>LABORATORY: Eurofins Eaton Analytical</p> <p>TURNAROUND TIME:  <input type="checkbox"/> SAME DAY    <input type="checkbox"/> 24 HR    <input type="checkbox"/> 48 HR  <input type="checkbox"/> 72 HR    <input type="checkbox"/> 5 DAYS    <input checked="" type="checkbox"/> STANDARD</p> <p>SPECIAL INSTRUCTIONS:          Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com,          &amp; rrtorres@gsi-net.com;          Provide EDD of sample results</p>	<p>PROJECT NAME: WRD Pilot</p> <p>PROJECT CONTACT: Miae Jeon</p> <p>GLOBAL ID:</p> <p>PROJECT NO.: 5302</p> <p>LAB CONTACT: Sophia Liang</p> <p>SAMPLER(S) (PRINT): <i>RDT</i></p>	<p><b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">LAB USE ONLY</th> <th rowspan="2">SAMPLE ID</th> <th colspan="2">SAMPLING</th> <th rowspan="2">MATRIX</th> <th rowspan="2">NO. OF CONT.</th> <th colspan="3">Preservation</th> <th rowspan="2">Field Filtered</th> <th rowspan="2">PFAS - full list (EPA 537.1)</th> <th rowspan="2">Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)</th> <th rowspan="2">Alkalinity (as CaCO3), (SM 2320B)</th> <th rowspan="2">TOC (SM 5310C)</th> <th rowspan="2">HOLD</th> </tr> <tr> <th>DATE</th> <th>TIME</th> <th>Unpreserved</th> <th>Preserved</th> </tr> </thead> <tbody> <tr> <td></td> <td>IX-5-20200505</td> <td>5-5</td> <td>1407</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-6-20200505</td> <td></td> <td>1410</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-7-20200505</td> <td></td> <td>1413</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-8-20200505</td> <td></td> <td>1416</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>MB-INF-20200505</td> <td></td> <td>1419</td> <td>Water</td> <td>5</td> <td>2</td> <td>3</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td></td> <td>MB-INF-DUP-20200505</td> <td></td> <td>1420</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>FB-20200505</td> <td></td> <td>1425</td> <td>Water</td> <td>1</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> </tr> </tbody> </table>	LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Preservation			Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	HOLD	DATE	TIME	Unpreserved	Preserved		IX-5-20200505	5-5	1407	Water	2		2		X							IX-6-20200505		1410	Water	2		2		X							IX-7-20200505		1413	Water	2		2		X							IX-8-20200505		1416	Water	2		2		X							MB-INF-20200505		1419	Water	5	2	3		X	X	X	X				MB-INF-DUP-20200505		1420	Water	2		2		X							FB-20200505		1425	Water	1		1							X
LAB USE ONLY	SAMPLE ID	SAMPLING			MATRIX	NO. OF CONT.			Preservation									Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	HOLD																																																																																																							
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# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 865226

**SAMPLE TEMP RECEIVED:**

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.  
**SAMPLES REC'D DAY OF COLLECTION? Yes / No**

IR Gun ID = 6168 (Observation = 12.3 °C) (Corr. Factor = 0.2 °C) (Final = 12.1 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Condition of Ice: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

**Compliance Acceptance Criteria:**

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_  
 6) Chlorine check. Manufacturer: Sansate. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

7) VOA Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

**Headspace Documentation (use additional VOC Internal COFC for additional bottles)**

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Sample ID	Bottle #	None/<6	>6mm	None/<6	>6mm	None/<6	>6mm	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: <u>Chuck Brooks</u>	PRINT NAME: <u>Chuck Brooks</u>	COMPANY/TITLE: <u>Eurolins Eaton Analytical</u>	DATE: <u>5-5-20</u>	TIME: <u>1652</u>
----------------------------------	---------------------------------	---	---------------------	-------------------

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Report:** 869296  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---

**Folder Comments**

5/6:Robert Torres:discard these samples due to sampling error:  
GAC-5-20200505  
GAC-6-20200505  
GAC-7-20200505  
GAC-8-20200505  
IX-5-20200505  
IX-6-20200505  
IX-7-20200505  
IX-8-20200505  
MB-INF-20200505  
MB-INF-DUP-20200505  
Plan to resample/resubmit May 6th

**Flags Legend:**

R6 - LFB/LFBD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/05/2020 1652

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	<b>202005050720</b>	<b><u>LH-INF-20200505</u></b>				
05/12/2020 17:50	Alkalinity in CaCO3 units		200		mg/L	2.0
05/05/2020 22:58	Chloride		100	250	mg/L	5.0
05/05/2020 22:58	Nitrate as Nitrogen by IC		2.7	10	mg/L	1.0
05/05/2020 22:58	Nitrate as NO3 (calc)		12	45	mg/L	4.4
05/09/2020 05:07	Perfluorobutanesulfonic acid (PFBS)		0.0066		ug/L	0.0020
05/09/2020 05:07	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
05/09/2020 05:07	Perfluorohexanesulfonic acid (PFHxS)		0.0073		ug/L	0.0020
05/09/2020 05:07	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
05/09/2020 05:07	Perfluorononanoic acid (PFNA)		0.0032		ug/L	0.0020
05/09/2020 05:07	Perfluorooctanesulfonic acid (PFOS)		0.037		ug/L	0.0020
05/09/2020 05:07	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
05/05/2020 22:58	Sulfate		160	250	mg/L	5.0
05/05/2020 22:58	Total Nitrate, Nitrite-N, CALC		2.7		mg/L	0.10
05/13/2020 10:29	Total Organic Carbon		0.75		mg/L	0.30

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/05/2020 1652

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20200505 (202005050712)</b>					<b>Sampled on 05/05/2020 1230</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	13C2-PFDA	109	%		1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	13C2-PFHxA	108	%		1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	13C3-HFPO-DA	102	%		1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	d3-NMeFOSAA	114	%		1
05/07/20	05/09/20 02:21	1246906	1247683	(EPA 537.1)	d5-NEtFOSAA	103	%		1

<b>GAC-2-20200505 (202005050713)</b>					<b>Sampled on 05/05/2020 1233</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/05/2020 1652

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	13C2-PFDA	107	%		1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	13C2-PFHxA	106	%		1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	13C3-HFPO-DA	100	%		1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/07/20	05/09/20 02:41	1246906	1247683	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**GAC-3-20200505 (202005050714)**

**Sampled on 05/05/2020 1236**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



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 1 800 566 LABS (1 800 566 5227)

Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/05/2020 1652

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	13C2-PFDA	106	%		1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	13C2-PFHxA	101	%		1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	13C3-HFPO-DA	97	%		1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	d3-NMeFOSAA	114	%		1
05/07/20	05/09/20 04:27	1246906	1247683	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**GAC-4-20200505 (202005050715)**

Sampled on 05/05/2020 1239

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/05/2020 1652

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	13C2-PFDA	108	%		1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	13C2-PFHxA	111	%		1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	13C3-HFPO-DA	103	%		1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/07/20	05/09/20 04:38	1246906	1247683	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**IX-1-20200505 (202005050716)**

Static ID: 537.1

Sampled on 05/05/2020 1242

**EPA 537.1 - EPA Method 537.1**

05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/05/2020 1652

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	13C2-PFDA	106	%		1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	13C2-PFHxA	106	%		1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	13C3-HFPO-DA	99	%		1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/07/20	05/09/20 04:48	1246906	1247683	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**IX-2-20200505 (202005050717)**

**Sampled on 05/05/2020 1245**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND (R6)	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	13C2-PFDA	107	%		1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	13C2-PFHxA	107	%		1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	13C2-PFOA- IS#1	91	%		1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	13C3-HFPO-DA	94	%		1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	13C4-PFOS- IS#2	88	%		1
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	d3-NMeFOSAA	95	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/05/2020 1652

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/06/20	05/07/20 17:11	1246640	1247175	(EPA 537.1)	d5-NEtFOSAA	104	%		1
<b>IX-3-20200505 (202005050718)</b>						<b>Sampled on 05/05/2020 1248</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND (R6)	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	13C2-PFDA	106	%		1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	13C2-PFHxA	106	%		1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	13C2-PFOA- IS#1	91	%		1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	13C3-HFPO-DA	94	%		1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	13C4-PFOS- IS#2	89	%		1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	d3-NMeFOSAA	92	%		1
05/06/20	05/07/20 17:30	1246640	1247175	(EPA 537.1)	d5-NEtFOSAA	103	%		1

<b>IX-4-20200505 (202005050719)</b>						<b>Sampled on 05/05/2020 1251</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/05/2020 1652

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	13C2-PFDA	103	%		1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	13C2-PFHxA	104	%		1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	13C3-HFPO-DA	96	%		1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	d3-NMeFOSAA	115	%		1
05/07/20	05/09/20 04:58	1246906	1247683	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**LH-INF-20200505 (202005050720)**

**Sampled on 05/05/2020 1254**

**SM 5310C - Total Organic Carbon**

05/13/20 10:29	1248381	(SM 5310C)	Total Organic Carbon	0.75	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

05/05/20 22:58	1246505	(EPA 300.0)	Nitrate as Nitrogen by IC	2.7	mg/L	1.0	10
05/05/20 22:58	1246505	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	4.4	10
05/05/20 22:58	1246505	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.12	10
05/05/20 22:58	1246505	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.7	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

05/05/20 22:58	1246506	(EPA 300.0)	Chloride	100	mg/L	5.0	10
05/05/20 22:58	1246506	(EPA 300.0)	Sulfate	160	mg/L	5.0	10

**EPA 537.1 - EPA Method 537.1**

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 1 800 566 LABS (1 800 566 5227)

Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/05/2020 1652

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	4,8-dioxa-3H-perfluoronanoic acid (ADONA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0066	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0073	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	Perfluoronanoic acid (PFNA)	0.0032	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.037	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	13C2-PFDA	106	%		1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	13C2-PFHxA	103	%		1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	13C3-HFPO-DA	97	%		1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/07/20	05/09/20 05:07	1246906	1247683	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**SM 2320B - Alkalinity in CaCO3 units**

05/12/20 17:50	1247913	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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**GAC-5-20200505 (202005050721)**

Sampled on 05/05/2020 1355

Static ID: 537.1

**Default - No Test**

:	(Default)	No Test	NA	1
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**GAC-6-20200505 (202005050722)**

Sampled on 05/05/2020 1358

Static ID: 537.1

**Default - No Test**

:	(Default)	No Test	NA	1
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Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/05/2020 1652

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b><u>GAC-7-20200505 (202005050723)</u></b>						<b>Sampled on 05/05/2020 1401</b>			
Static ID: 537.1									
<b>Default - No Test</b>									
:				(Default)	No Test	NA			1
<b><u>GAC-8-20200505 (202005050724)</u></b>						<b>Sampled on 05/05/2020 1404</b>			
Static ID: 537.1									
<b>Default - No Test</b>									
:				(Default)	No Test	NA			1
<b><u>IX-5-20200505 (202005050725)</u></b>						<b>Sampled on 05/05/2020 1407</b>			
Static ID: 537.1									
<b>Default - No Test</b>									
:				(Default)	No Test	NA			1
<b><u>IX-6-20200505 (202005050726)</u></b>						<b>Sampled on 05/05/2020 1410</b>			
Static ID: 537.1									
<b>Default - No Test</b>									
:				(Default)	No Test	NA			1
<b><u>IX-7-20200505 (202005050727)</u></b>						<b>Sampled on 05/05/2020 1413</b>			
Static ID: 537.1									
<b>Default - No Test</b>									
:				(Default)	No Test	NA			1
<b><u>IX-8-20200505 (202005050728)</u></b>						<b>Sampled on 05/05/2020 1416</b>			
Static ID: 537.1									
<b>Default - No Test</b>									
:				(Default)	No Test	NA			1
<b><u>MB-INF--20200505 (202005050729)</u></b>						<b>Sampled on 05/05/2020 1419</b>			
<b>Default - No Test</b>									
:				(Default)	No Test	NA			1
<b><u>MB-INF-DUP-20200505 (202005050730)</u></b>						<b>Sampled on 05/05/2020 1420</b>			
Static ID: 537.1									
<b>Default - No Test</b>									
:				(Default)	No Test	NA			1
<b><u>FB-HOLD-20200505 (202005050731)</u></b>						<b>Sampled on 05/05/2020 1425</b>			
<b>EPA 537.1 - EPA Method 537.1</b>									
05/13/20	05/14/20	14:49	1248108	1248924	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ug/L	0.0020	1
05/13/20	05/14/20	14:49	1248108	1248924	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ug/L	0.0020	1
05/13/20	05/14/20	14:49	1248108	1248924	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 869296  
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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/05/2020 1652

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	13C2-PFDA	114	%		1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	13C2-PFHxA	123	%		1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	13C3-HFPO-DA	113	%		1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	d3-NMeFOSAA	108	%		1
05/13/20	05/14/20 14:49	1248108	1248924	(EPA 537.1)	d5-NEtFOSAA	107	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (866) 988-3757  
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**Report:** 869296  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

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**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1246505**

202005050720 LH-INF-20200505

**Analysis Date: 05/05/2020**

Analyzed by: B9PD

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1246506**

202005050720 LH-INF-20200505

**Analysis Date: 05/05/2020**

Analyzed by: B9PD

**EPA Method 537.1**

**Prep Batch: 1246640 Analytical Batch: 1247175**

202005050717 IX-2-20200505

202005050718 IX-3-20200505

**Analysis Date: 05/07/2020**

Analyzed by: KAM

Analyzed by: KAM

**EPA Method 537.1**

**Prep Batch: 1246906 Analytical Batch: 1247683**

202005050712 GAC-1-20200505

202005050713 GAC-2-20200505

202005050714 GAC-3-20200505

202005050715 GAC-4-20200505

202005050716 IX-1-20200505

202005050719 IX-4-20200505

202005050720 LH-INF-20200505

**Analysis Date: 05/09/2020**

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

**Alkalinity in CaCO3 units**

**Analytical Batch: 1247913**

202005050720 LH-INF-20200505

**Analysis Date: 05/12/2020**

Analyzed by: ZB2Z

**Total Organic Carbon**

**Analytical Batch: 1248381**

202005050720 LH-INF-20200505

**Analysis Date: 05/13/2020**

Analyzed by: ZS6I

**EPA Method 537.1**

**Prep Batch: 1248108 Analytical Batch: 1248924**

202005050731 FB-HOLD-20200505

**Analysis Date: 05/14/2020**

Analyzed by: KAM

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Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1246505</b>					<b>Analysis Date: 05/05/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.55	mg/L	102	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.53	mg/L	101	(90-110)	20	0.79
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0490	mg/L	98	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0109	mg/L	87	(50-150)		
MS_202003180305	Nitrate as Nitrogen by IC	3.7	2.6	6.38	mg/L	107	(80-120)		
MS_202005050706	Nitrate as Nitrogen by IC	ND	32.5	32.8	mg/L	105	(80-120)		
MSD_202003180305	Nitrate as Nitrogen by IC	3.7	2.6	6.39	mg/L	108	(80-120)	20	0.24
MSD_202005050706	Nitrate as Nitrogen by IC	ND	32.5	33.1	mg/L	106	(80-120)	20	0.87
LCS1	Nitrite Nitrogen by IC		1	1.01	mg/L	101	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.01	mg/L	101	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0473	mg/L	95	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0125	mg/L	100	(50-150)		
MS_202003180305	Nitrite Nitrogen by IC	ND	1	0.981	mg/L	98	(80-120)		
MS_202005050706	Nitrite Nitrogen by IC	ND	12.5	12.3	mg/L	98	(80-120)		
MSD_202003180305	Nitrite Nitrogen by IC	ND	1	0.993	mg/L	99	(80-120)	20	1.3
MSD_202005050706	Nitrite Nitrogen by IC	ND	12.5	12.4	mg/L	99	(80-120)	20	1.0
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1246506</b>					<b>Analysis Date: 05/05/2020</b>				
LCS1	Chloride		25	26.2	mg/L	105	(90-110)		
LCS2	Chloride		25	26.0	mg/L	104	(90-110)	20	0.77
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.446	mg/L	89	(50-150)		
MS_202003180305	Chloride	43	26	70.4	mg/L	109	(80-120)		
MS_202005050706	Chloride	570	325	906	mg/L	107	(80-120)		
MSD_202003180305	Chloride	43	26	70.7	mg/L	110	(80-120)	20	0.36
MSD_202005050706	Chloride	570	325	910	mg/L	108	(80-120)	20	0.49
LCS1	Sulfate		50	51.9	mg/L	104	(90-110)		
LCS2	Sulfate		50	51.5	mg/L	103	(90-110)	20	0.77
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.988	mg/L	99	(50-150)		
MRL_W	Sulfate		0.25	0.242	mg/L	97	(50-150)		
MS_202003180305	Sulfate	160	50	ND	mg/L				

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202005050706	Sulfate	ND	50	668	mg/L	107	(80-120)		
MSD_202003180305	Sulfate	160	50	ND	mg/L				
MSD_202005050706	Sulfate	ND	50	674	mg/L	108	(80-120)	20	0.88

EPA Method 537.1 by EPA 537.1

Prep Batch: 1246640 Analytical Batch: 1247175

Analysis Date: 05/07/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202005050718	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0510	ug/L	108	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0524	ug/L	111	(70-130)	30	2.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00208	ug/L	111	(50-150)		
MS2_202005050717	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0521	ug/L	111	(70-130)		
DUP_202005050718	13C2-PFDA (S)			113	%	113	(70-130)		
LCS3	13C2-PFDA (S)		100	105	%	105	(70-130)		
LCS4	13C2-PFDA (S)		100	112	%	112	(70-130)		
MBLK	13C2-PFDA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	111	%	111	(70-130)		
MS2_202005050717	13C2-PFDA (S)		100	108	%	108	(70-130)		
DUP_202005050718	13C2-PFHxA (S)			114	%	115	(70-130)		
LCS3	13C2-PFHxA (S)		100	95.1	%	95	(70-130)		
LCS4	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFHxA (S)			112	%	112	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	110	%	110	(70-130)		
MS2_202005050717	13C2-PFHxA (S)		100	105	%	105	(70-130)		
DUP_202005050718	13C2-PFOA- IS#1 (I)			92.1	%	92	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	91.7	%	92	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	86.8	%	87	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			92.0	%	92	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	91.6	%	92	(50-150)		
MS2_202005050717	13C2-PFOA- IS#1 (I)		100	91.4	%	91	(50-150)		
DUP_202005050718	13C3-HFPO-DA (S)			99.1	%	99	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	85.1	%	85	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	97.9	%	98	(70-130)		
MBLK	13C3-HFPO-DA (S)			91.8	%	92	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	94.4	%	94	(70-130)		
MS2_202005050717	13C3-HFPO-DA (S)		100	94.8	%	95	(70-130)		
DUP_202005050718	13C4-PFOS- IS#2 (I)			90.2	%	90	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	89.0	%	89	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	13C4-PFOS- IS#2 (I)		100	90.7	%	91	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			87.6	%	88	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	88.2	%	88	(50-150)		
MS2_202005050717	13C4-PFOS- IS#2 (I)		100	87.6	%	88	(50-150)		
DUP_202005050718	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0481	ug/L	99	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0538	ug/L	111	(70-130)	30	11
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00206	ug/L	109	(50-150)		
MS2_202005050717	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0519	ug/L	107	(70-130)		
DUP_202005050718	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0480	ug/L	103	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0510	ug/L	109	(70-130)	30	5.8
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00205	ug/L	110	(50-150)		
MS2_202005050717	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0483	ug/L	104	(70-130)		
DUP_202005050718	d3-NMeFOSAA (I)			94.8	%	95	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	89.9	%	90	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	92.2	%	92	(50-150)		
MBLK	d3-NMeFOSAA (I)			95.1	%	95	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	93.7	%	94	(50-150)		
MS2_202005050717	d3-NMeFOSAA (I)		100	93.7	%	94	(50-150)		
DUP_202005050718	d5-NEtFOSAA (S)			106	%	106	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	99.3	%	99	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	99.4	%	99	(70-130)		
MBLK	d5-NEtFOSAA (S)			98.3	%	98	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MS2_202005050717	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
DUP_202005050718	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0428	ug/L	86	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0532	ug/L	106	(70-130)	30	22
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00196	ug/L	98	(50-150)		
MS2_202005050717	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0490	ug/L	98	(70-130)		
DUP_202005050718	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0502	ug/L	100	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0515	ug/L	103	(70-130)	30	2.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 869296  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00198	ug/L	99	(50-150)		
MS2_202005050717	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0518	ug/L	103	(70-130)		
DUP_202005050718	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0493	ug/L	99	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0521	ug/L	104	(70-130)	30	5.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00210	ug/L	105	(50-150)		
MS2_202005050717	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0504	ug/L	101	(70-130)		
DUP_202005050718	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0334	ug/L	76	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0453	ug/L	102	(70-130)	30	30
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00188	ug/L	106	(50-150)		
MS2_202005050717	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0411	ug/L	93	(70-130)		
DUP_202005050718	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0535	ug/L	107	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0587	ug/L	117	(70-130)	30	9.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00227	ug/L	114	(50-150)		
MS2_202005050717	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0553	ug/L	111	(70-130)		
DUP_202005050718	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0518	ug/L	104	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0582	ug/L	116	(70-130)	30	12
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00218	ug/L	109	(50-150)		
MS2_202005050717	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0542	ug/L	108	(70-130)		
DUP_202005050718	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0528	ug/L	106	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0589	ug/L	118	(70-130)	30	11
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00225	ug/L	112	(50-150)		
MS2_202005050717	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0562	ug/L	112	(70-130)		
DUP_202005050718	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0492	ug/L	108	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0517	ug/L	113	(70-130)	30	5.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00206	ug/L	113	(50-150)		
MS2_202005050717	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0511	ug/L	112	(70-130)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202005050718	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0455	ug/L	91	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0569	ug/L	114	(70-130)	30	22
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00227	ug/L	114	(50-150)		
MS2_202005050717	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0528	ug/L	105	(70-130)		
DUP_202005050718	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0509	ug/L	102	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0560	ug/L	112	(70-130)	30	9.7
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00218	ug/L	109	(50-150)		
MS2_202005050717	Perfluorononanoic acid (PFNA)	ND	0.05	0.0532	ug/L	106	(70-130)		
DUP_202005050718	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0479	ug/L	103	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0521	ug/L	113	(70-130)	30	8.4
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00211	ug/L	114	(50-150)		
MS2_202005050717	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0490	ug/L	106	(70-130)		
DUP_202005050718	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0578	ug/L	116	(70-130)	30	8.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00223	ug/L	112	(50-150)		
MS2_202005050717	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0557	ug/L	111	(70-130)		
DUP_202005050718	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0544	ug/L	109	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0607	ug/L	121	(70-130)	30	11
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00264	ug/L	132	(50-150)		
MS2_202005050717	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0579	ug/L	115	(70-130)		
DUP_202005050718	Perfluorotridecanoic acid (PFTTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTTrDA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTTrDA)		0.05	0.0570	ug/L	114	(70-130)	30	8.4
MBLK	Perfluorotridecanoic acid (PFTTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTTrDA)		0.002	0.00216	ug/L	108	(50-150)		
MS2_202005050717	Perfluorotridecanoic acid (PFTTrDA)	ND	0.05	0.0525	ug/L	105	(70-130)		
DUP_202005050718	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0510	ug/L	102	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0559	ug/L	112	(70-130)	30	9.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00215	ug/L	107	(50-150)		
MS2_202005050717	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0529	ug/L	106	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1246906 Analytical Batch: 1247683

Analysis Date: 05/09/2020

DUP_202005050713	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0238	ug/L	101	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0265	ug/L	113	(70-130)	30	11
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00208	ug/L	111	(50-150)		
MS_202005050712	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00204	ug/L	108	(50-150)		
DUP_202005050713	13C2-PFDA (S)			105	%	105	(70-130)		
LCS1	13C2-PFDA (S)		100	104	%	104	(70-130)		
LCS2	13C2-PFDA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFDA (S)			99.7	%	100	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	113	%	113	(70-130)		
MS_202005050712	13C2-PFDA (S)		100	108	%	108	(70-130)		
DUP_202005050713	13C2-PFHxA (S)			106	%	106	(70-130)		
LCS1	13C2-PFHxA (S)		100	98.7	%	99	(70-130)		
LCS2	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFHxA (S)			89.2	%	89	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MS_202005050712	13C2-PFHxA (S)		100	104	%	104	(70-130)		
DUP_202005050713	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	99.8	%	100	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	97.4	%	97	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			103	%	103	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MS_202005050712	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
DUP_202005050713	13C3-HFPO-DA (S)			95.4	%	95	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	93.2	%	93	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	94.9	%	95	(70-130)		
MBLK	13C3-HFPO-DA (S)			85.0	%	85	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	93.2	%	93	(70-130)		
MS_202005050712	13C3-HFPO-DA (S)		100	98.4	%	98	(70-130)		
DUP_202005050713	13C4-PFOS- IS#2 (I)			100	%	100	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	13C4-PFOS- IS#2 (I)		100	96.1	%	96	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	94.4	%	94	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MS_202005050712	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
DUP_202005050713	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0260	ug/L	110	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0286	ug/L	121	(70-130)	30	9.5
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00199	ug/L	105	(50-150)		
MS_202005050712	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00216	ug/L	115	(50-150)		
DUP_202005050713	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0269	ug/L	115	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0284	ug/L	122	(70-130)	30	5.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00198	ug/L	106	(50-150)		
MS_202005050712	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00200	ug/L	107	(50-150)		
DUP_202005050713	d3-NMeFOSAA (I)			114	%	114	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	99.0	%	99	(50-150)		
MBLK	d3-NMeFOSAA (I)			114	%	114	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	112	%	112	(50-150)		
MS_202005050712	d3-NMeFOSAA (I)		100	114	%	114	(50-150)		
DUP_202005050713	d5-NEtFOSAA (S)			103	%	103	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	96.6	%	97	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	94.8	%	95	(70-130)		
MBLK	d5-NEtFOSAA (S)			91.3	%	91	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	108	%	108	(70-130)		
MS_202005050712	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
DUP_202005050713	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0261	ug/L	104	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0284	ug/L	114	(70-130)	30	8.4
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00185	ug/L	93	(50-150)		
MS_202005050712	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00225	ug/L	112	(50-150)		
DUP_202005050713	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0272	ug/L	109	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0293	ug/L	117	(70-130)	30	7.4

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	105	(50-150)		
MS_202005050712	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00219	ug/L	110	(50-150)		
DUP_202005050713	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0276	ug/L	110	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0295	ug/L	118	(70-130)	30	6.7
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00203	ug/L	101	(50-150)		
MS_202005050712	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00220	ug/L	110	(50-150)		
DUP_202005050713	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0229	ug/L	103	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0284	ug/L	128	(70-130)	30	21
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00160	ug/L	90	(50-150)		
MS_202005050712	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00185	ug/L	104	(50-150)		
DUP_202005050713	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0286	ug/L	114	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0309	ug/L	124	(70-130)	30	7.7
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202005050712	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00229	ug/L	114	(50-150)		
DUP_202005050713	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0300	ug/L	120	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0302	ug/L	121	(70-130)	30	0.66
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00231	ug/L	116	(50-150)		
MS_202005050712	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00240	ug/L	120	(50-150)		
DUP_202005050713	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0284	ug/L	114	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0308	ug/L	123	(70-130)	30	8.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00225	ug/L	113	(50-150)		
MS_202005050712	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00238	ug/L	119	(50-150)		
DUP_202005050713	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0269	ug/L	118	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0284	ug/L	124	(70-130)	30	5.4
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00202	ug/L	111	(50-150)		

Spike recovery is already corrected for native results.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202005050712	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00215	ug/L	118	(50-150)		
DUP_202005050713	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0305	ug/L	122	(70-130)	30	13
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00216	ug/L	108	(50-150)		
MS_202005050712	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00239	ug/L	116	(50-150)		
DUP_202005050713	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0285	ug/L	114	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0310	ug/L	124	(70-130)	30	8.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00231	ug/L	115	(50-150)		
MS_202005050712	Perfluorononanoic acid (PFNA)	ND	0.002	0.00248	ug/L	124	(50-150)		
DUP_202005050713	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0277	ug/L	120	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0292	ug/L	126	(70-130)	30	5.3
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00197	ug/L	106	(50-150)		
MS_202005050712	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00212	ug/L	106	(50-150)		
DUP_202005050713	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0285	ug/L	114	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0302	ug/L	121	(70-130)	30	5.8
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202005050712	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00254	ug/L	120	(50-150)		
DUP_202005050713	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0295	ug/L	118	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0312	ug/L	125	(70-130)	30	5.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00247	ug/L	123	(50-150)		
MS_202005050712	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00281	ug/L	129	(50-150)		
DUP_202005050713	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0319	ug/L	128	(70-130)	30	8.8
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00222	ug/L	111	(50-150)		
MS_202005050712	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00246	ug/L	123	(50-150)		
DUP_202005050713	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		

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Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0290	ug/L	116	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0304	ug/L	122	(70-130)	30	4.7
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00221	ug/L	110	(50-150)		
MS_202005050712	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00237	ug/L	119	(50-150)		

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1247913

Analysis Date: 05/12/2020

LCS1	Alkalinity in CaCO3 units		100	99.1	mg/L	99	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.6	mg/L	99	(90-110)	20	0.51
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.94	mg/L	97	(50-150)		
MS_202005060726	Alkalinity in CaCO3 units	160	100	273	mg/L	109	(80-120)		
MS_202005070659	Alkalinity in CaCO3 units	150	100	257	mg/L	110	(80-120)		
MSD_202005060726	Alkalinity in CaCO3 units	160	100	272	mg/L	108	(80-120)	20	0.30
MSD_202005070659	Alkalinity in CaCO3 units	150	100	257	mg/L	110	(80-120)	20	0.043

Total Organic Carbon by SM 5310C

Analytical Batch: 1248381

Analysis Date: 05/13/2020

LCS1	Total Organic Carbon		5	5.38	mg/L	108	(90-110)		
LCS2	Total Organic Carbon		5	5.30	mg/L	106	(90-110)	20	1.5
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.249	mg/L	124	(50-150)		
MS_202001160026	Total Organic Carbon	3.0	4	7.12	mg/L	103	(80-120)		
MSD_202001160026	Total Organic Carbon	3.0	4	7.07	mg/L	101	(80-120)	20	0.78

EPA Method 537.1 by EPA 537.1

Prep Batch: 1248108 Analytical Batch: 1248924

Analysis Date: 05/14/2020

DUP_202005130110	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0508	ug/L	108	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0508	ug/L	108	(70-130)	30	0.0
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00207	ug/L	110	(50-150)		
MS2_202004210171	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0557	ug/L	118	(70-130)		
DUP_202005130110	13C2-PFDA (S)			134	%	<b>134</b>	(70-130)		
LCS3	13C2-PFDA (S)		100	120	%	120	(70-130)		
LCS4	13C2-PFDA (S)		100	118	%	119	(70-130)		
MBLK	13C2-PFDA (S)			121	%	121	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	122	%	122	(70-130)		

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Report: 869296  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202004210171	13C2-PFDA (S)		100	116	%	116	(70-130)		
DUP_202005130110	13C2-PFHxA (S)			135	%	<b>135</b>	(70-130)		
LCS3	13C2-PFHxA (S)		100	122	%	122	(70-130)		
LCS4	13C2-PFHxA (S)		100	122	%	123	(70-130)		
MBLK	13C2-PFHxA (S)			125	%	125	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	120	%	120	(70-130)		
MS2_202004210171	13C2-PFHxA (S)		100	124	%	124	(70-130)		
DUP_202005130110	13C2-PFOA- IS#1 (I)			99.6	%	100	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	99.3	%	99	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MS2_202004210171	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
DUP_202005130110	13C3-HFPO-DA (S)			128	%	128	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	112	%	112	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	112	%	112	(70-130)		
MBLK	13C3-HFPO-DA (S)			114	%	114	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	114	%	114	(70-130)		
MS2_202004210171	13C3-HFPO-DA (S)		100	117	%	117	(70-130)		
DUP_202005130110	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	99.3	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			96.1	%	96	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MS2_202004210171	13C4-PFOS- IS#2 (I)		100	98.4	%	98	(50-150)		
DUP_202005130110	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0514	ug/L	106	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0502	ug/L	103	(70-130)	30	2.4
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00225	ug/L	119	(50-150)		
MS2_202004210171	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0522	ug/L	108	(70-130)		
DUP_202005130110	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0497	ug/L	107	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0508	ug/L	109	(70-130)	30	2.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00212	ug/L	114	(50-150)		
MS2_202004210171	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0501	ug/L	108	(70-130)		
DUP_202005130110	d3-NMeFOSAA (I)			107	%	107	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MBLK	d3-NMeFOSAA (I)			104	%	104	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MS2_202004210171	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
DUP_202005130110	d5-NEtFOSAA (S)			120	%	120	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MBLK	d5-NEtFOSAA (S)			114	%	114	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	113	%	113	(70-130)		
MS2_202004210171	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
DUP_202005130110	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0516	ug/L	103	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0506	ug/L	101	(70-130)	30	2.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00211	ug/L	106	(50-150)		
MS2_202004210171	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0522	ug/L	104	(70-130)		
DUP_202005130110	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0498	ug/L	100	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0521	ug/L	104	(70-130)	30	4.5
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00218	ug/L	109	(50-150)		
MS2_202004210171	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0528	ug/L	106	(70-130)		
DUP_202005130110	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0507	ug/L	101	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0520	ug/L	104	(70-130)	30	2.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00228	ug/L	114	(50-150)		
MS2_202004210171	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0519	ug/L	104	(70-130)		
DUP_202005130110	Perfluorobutanesulfonic acid (PFBS)	0.019		0.0183	ug/L		(0-30)	30	1.8
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0480	ug/L	109	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0488	ug/L	110	(70-130)	30	1.9
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00202	ug/L	114	(50-150)		
MS2_202004210171	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0488	ug/L	109	(70-130)		
DUP_202005130110	Perfluorodecanoic acid (PFDA)	0.0042		0.00412	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0558	ug/L	112	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0536	ug/L	107	(70-130)	30	4.0

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Report: 869296  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00241	ug/L	120	(50-150)		
MS2_202004210171	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0547	ug/L	109	(70-130)		
DUP_202005130110	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0516	ug/L	103	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0521	ug/L	104	(70-130)	30	0.96
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00219	ug/L	110	(50-150)		
MS2_202004210171	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0525	ug/L	105	(70-130)		
DUP_202005130110	Perfluoroheptanoic acid (PFHpA)	0.010		0.00976	ug/L		(0-30)	30	2.0
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0566	ug/L	113	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0573	ug/L	115	(70-130)	30	1.2
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00246	ug/L	123	(50-150)		
MS2_202004210171	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0583	ug/L	116	(70-130)		
DUP_202005130110	Perfluorohexanesulfonic acid (PFHxS)	0.015		0.0151	ug/L		(0-30)	30	2.2
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0496	ug/L	109	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0502	ug/L	110	(70-130)	30	1.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00216	ug/L	119	(50-150)		
MS2_202004210171	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0496	ug/L	108	(70-130)		
DUP_202005130110	Perfluorohexanoic acid (PFHxA)	0.027		0.0272	ug/L		(0-30)	30	1.9
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0569	ug/L	114	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0540	ug/L	108	(70-130)	30	5.2
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00236	ug/L	118	(50-150)		
MS2_202004210171	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0572	ug/L	112	(70-130)		
DUP_202005130110	Perfluorononanoic acid (PFNA)	0.0051		0.00479	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0565	ug/L	113	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0542	ug/L	108	(70-130)	30	4.2
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00243	ug/L	122	(50-150)		
MS2_202004210171	Perfluorononanoic acid (PFNA)	ND	0.05	0.0536	ug/L	107	(70-130)		
DUP_202005130110	Perfluorooctanesulfonic acid (PFOS)	0.081		0.0804	ug/L		(0-30)	30	0.31
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0478	ug/L	103	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0475	ug/L	103	(70-130)	30	0.63
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00208	ug/L	112	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 869296  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202004210171	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0480	ug/L	103	(70-130)		
DUP_202005130110	Perfluorooctanoic acid (PFOA)	0.019		0.0193	ug/L		(0-30)	30	1.2
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0547	ug/L	109	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0542	ug/L	108	(70-130)	30	0.92
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00236	ug/L	118	(50-150)		
MS2_202004210171	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0554	ug/L	110	(70-130)		
DUP_202005130110	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0563	ug/L	113	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0539	ug/L	108	(70-130)	30	4.4
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00249	ug/L	125	(50-150)		
MS2_202004210171	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0578	ug/L	115	(70-130)		
DUP_202005130110	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0530	ug/L	106	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0509	ug/L	102	(70-130)	30	4.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00220	ug/L	110	(50-150)		
MS2_202004210171	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0536	ug/L	107	(70-130)		
DUP_202005130110	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0522	ug/L	105	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0534	ug/L	107	(70-130)	30	2.1
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00209	ug/L	104	(50-150)		
MS2_202004210171	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0517	ug/L	103	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 05/15/2020

Quant Report - Page 1 of 1

, Tel Fax



**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 05/15/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 05/15/2020

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for  
 Presence or Absence, Quantification of Total Coliform and E. Coli  
 By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	Total Coliform	E. Coli Large	Total Coliform	Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 05/15/2020

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
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1 800 566 LABS (1 800 566 5227)



## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 870644  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 870644  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **May 12, 2020 at 1340**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202005120500</u>	GAC-1-20200512	05/12/2020 0925
	@537.1	
<u>202005120501</u>	GAC-2-20200512	05/12/2020 0928
	@537.1	
<u>202005120502</u>	GAC-3-20200512	05/12/2020 0931
	@537.1	
<u>202005120503</u>	GAC-4-20200512	05/12/2020 0934
	@537.1	
<u>202005120504</u>	IX-1-20200512	05/12/2020 0937
	@537.1	
<u>202005120505</u>	IX-2-20200512	05/12/2020 0940
	@537.1	
<u>202005120506</u>	IX-3-20200512	05/12/2020 0943
	@537.1	
<u>202005120507</u>	IX-4-20200512	05/12/2020 0946
	@537.1	
<u>202005120508</u>	LH-INF 20200512	05/12/2020 0949
	@537.1	
	Chloride	@ANIONS48 Alkalinity in CaCO3 units
	Sulfate	Total Organic Carbon
<u>202005120509</u>	LH-INF-DUP-20200512	05/12/2020 0950
	@537.1	
<u>202005120510</u>	GAC-5-20200512	05/12/2020 1131
	@537.1	
<u>202005120511</u>	GAC-6-20200512	05/12/2020 1134
	@537.1	
<u>202005120512</u>	GAC-7-20200512	05/12/2020 1137



### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 870644  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **May 12, 2020 at 1340**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202005120513	GAC-8-20200512	05/12/2020 1140
	@537.1	
202005120514	IX-5-20200512	05/12/2020 1143
	@537.1	
202005120515	IX-6-20200512	05/12/2020 1146
	@537.1	
202005120516	IX-7-20200512	05/12/2020 1149
	@537.1	
202005120517	IX-8-20200512	05/12/2020 1152
	@537.1	
202005120518	MB-INF-20200512	05/12/2020 1155
	@537.1	
	Chloride	Alkalinity in CaCO3 units
	Sulfate	Total Organic Carbon
202005120519	FB-20200512	05/12/2020 1158
	@537.1 FB	

#### Test Description

- @537.1 -- EPA Method 537.1
- @537.1 FB -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0

*STOLAN*

<p>FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070</p> <p>TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com</p> <p>LABORATORY: Eurofins Eaton Analytical</p> <p>TURNAROUND TIME:  <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR  <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD</p> <p>SPECIAL INSTRUCTIONS:          Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com,          &amp; rdtorres@gsi-net.com;          Provide EDD of sample results</p>	<p>PROJECT NAME: WRD Pilot</p> <p>PROJECT CONTACT: Miae Jeon</p> <p>GLOBAL ID:</p> <p>PROJECT NO.: 5302</p> <p>LAB CONTACT: Sophia Liang</p> <p>SAMPLER(S): (PRINT) <i>RDT/BC</i></p>	<p><b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">LAB USE ONLY</th> <th rowspan="2">SAMPLE ID</th> <th colspan="2">SAMPLING</th> <th rowspan="2">MATRIX</th> <th rowspan="2">NO. OF CONT.</th> <th colspan="2">Preservation</th> <th rowspan="2">PFAS - full list (EPA 537.1)</th> <th rowspan="2">Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)</th> <th rowspan="2">Alkalinity (as CaCO3), (SM 2320B)</th> <th rowspan="2">TOC (SM 5310C)</th> </tr> <tr> <th>DATE</th> <th>TIME</th> <th>Unpreserved</th> <th>Preserved</th> <th>Field Filtered</th> </tr> </thead> <tbody> <tr><td></td><td>GAC-1-20200512</td><td>5-12</td><td>09:25</td><td>Water</td><td>2</td><td></td><td><i>2</i></td><td><i>2</i></td><td><i>2</i></td><td></td><td></td></tr> <tr><td></td><td>GAC-2-20200512</td><td></td><td>09:28</td><td>Water</td><td>2</td><td></td><td><i>2</i></td><td><i>2</i></td><td></td><td></td><td></td></tr> <tr><td></td><td>GAC-3-20200512</td><td></td><td>09:31</td><td>Water</td><td>2</td><td></td><td><i>2</i></td><td><i>2</i></td><td></td><td></td><td></td></tr> <tr><td></td><td>GAC-4-20200512</td><td></td><td>09:34</td><td>Water</td><td>2</td><td></td><td><i>2</i></td><td><i>2</i></td><td></td><td></td><td></td></tr> <tr><td></td><td>IX-1-20200512</td><td></td><td>09:37</td><td>Water</td><td>2</td><td></td><td><i>2</i></td><td><i>2</i></td><td></td><td></td><td></td></tr> <tr><td></td><td>IX-2-20200512</td><td></td><td>09:40</td><td>Water</td><td>2</td><td></td><td><i>2</i></td><td><i>2</i></td><td></td><td></td><td></td></tr> <tr><td></td><td>IX-3-20200512</td><td></td><td>09:43</td><td>Water</td><td>2</td><td></td><td><i>2</i></td><td><i>2</i></td><td></td><td></td><td></td></tr> <tr><td></td><td>IX-4-20200512</td><td></td><td>09:46</td><td>Water</td><td>2</td><td></td><td><i>2</i></td><td><i>2</i></td><td></td><td></td><td></td></tr> <tr><td></td><td>LH-INF-20200512</td><td></td><td>09:49</td><td>Water</td><td>5</td><td><i>2</i></td><td><i>3</i></td><td><i>2</i></td><td><i>X</i></td><td><i>X</i></td><td><i>X</i></td></tr> <tr><td></td><td>LH-INF-DUP-20200512</td><td></td><td>09:50</td><td>Water</td><td>2</td><td></td><td><i>2</i></td><td><i>2</i></td><td><i>X</i></td><td></td><td></td></tr> <tr><td></td><td>GAC-5-20200512</td><td></td><td>11:31</td><td>Water</td><td>2</td><td></td><td><i>2</i></td><td><i>2</i></td><td></td><td></td><td></td></tr> <tr><td></td><td>GAC-6-20200512</td><td></td><td>11:34</td><td>Water</td><td>2</td><td></td><td><i>2</i></td><td><i>2</i></td><td></td><td></td><td></td></tr> <tr><td></td><td>GAC-7-20200512</td><td></td><td>11:37</td><td>Water</td><td>2</td><td></td><td><i>2</i></td><td><i>2</i></td><td></td><td></td><td></td></tr> <tr><td></td><td>GAC-8-20200512</td><td></td><td>11:40</td><td>Water</td><td>2</td><td></td><td><i>2</i></td><td><i>2</i></td><td></td><td></td><td></td></tr> </tbody> </table>	LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Preservation		PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	DATE	TIME	Unpreserved	Preserved	Field Filtered		GAC-1-20200512	5-12	09:25	Water	2		<i>2</i>	<i>2</i>	<i>2</i>				GAC-2-20200512		09:28	Water	2		<i>2</i>	<i>2</i>					GAC-3-20200512		09:31	Water	2		<i>2</i>	<i>2</i>					GAC-4-20200512		09:34	Water	2		<i>2</i>	<i>2</i>					IX-1-20200512		09:37	Water	2		<i>2</i>	<i>2</i>					IX-2-20200512		09:40	Water	2		<i>2</i>	<i>2</i>					IX-3-20200512		09:43	Water	2		<i>2</i>	<i>2</i>					IX-4-20200512		09:46	Water	2		<i>2</i>	<i>2</i>					LH-INF-20200512		09:49	Water	5	<i>2</i>	<i>3</i>	<i>2</i>	<i>X</i>	<i>X</i>	<i>X</i>		LH-INF-DUP-20200512		09:50	Water	2		<i>2</i>	<i>2</i>	<i>X</i>				GAC-5-20200512		11:31	Water	2		<i>2</i>	<i>2</i>					GAC-6-20200512		11:34	Water	2		<i>2</i>	<i>2</i>					GAC-7-20200512		11:37	Water	2		<i>2</i>	<i>2</i>					GAC-8-20200512		11:40	Water	2		<i>2</i>	<i>2</i>			
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<p>Relinquished by: (Signature) <i>RDT</i></p>						<p>Received by: (Signature) <i>FC</i></p>						Date: <u>5-12-20</u>	Time: <u>1337</u>																																																																																																																																																																														
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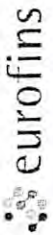
<b>FROM:</b> GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 (949) 679-1070	<b>PROJECT NAME:</b> WRD Pilot <b>PROJECT CONTACT:</b> Miae Jeon GLOBAL ID:
<b>TEL:</b> (949) 679-1070 <b>E-MAIL:</b> mjeon@gsi-net.com	<b>PROJECT NO.:</b> 5302 <b>LAB CONTACT:</b> Sophia Liang <b>SAMPLER(S):</b> (PRINT)

**LABORATORY:** Eurofins Eaton Analytical  
**TURNAROUND TIME:**  SAME DAY  24 HR  48 HR  STANDARD

**SPECIAL INSTRUCTIONS:**  
 Send report copies to pegalwin@gsi-net.com, mjeon@gsi-net.com, & rdortres@gsi-net.com;  
 Provide EDD of sample results

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	REQUESTED ANALYSES										
		DATE	TIME						Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	hold							
	IX-5 - 20200512	5-12	1143	Water	2				X										
	IX-6 - 20200512	↓		Water	2				X										
	IX-7 - 20200512			Water	2					X									
	IX-8 - 20200512			Water	2					X									
	MB-INF - 20200512		1152	Water	5	2	3		X	X	X								
	<del>MB-INF-DUP-16</del>			Water															
	FB - 20200512		1158	Water	1		1			X									

<b>Relinquished by:</b> (Signature) <i>DEL ZUS</i>	<b>Received by:</b> (Signature) Date: <u>5-12-20</u> Time: <u>1337</u>
<b>Relinquished by:</b> (Signature)	<b>Received by:</b> (Signature) Date: <u>5-12-20</u> Time: <u>1340</u>
<b>Relinquished by:</b> (Signature)	<b>Received by:</b> (Signature) Date: _____ Time: _____



Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

Handwritten signature and initials in a box.

IR Gun ID = 6301A (Observation = 8.6 °C) (Corr. Factor 0.2 °C) (Final = 8.4 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Condition of Ice: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) VOA Headspace:  No Samples with Headspace:  Samples with Headspace (see below):   
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532L.CMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: [Signature] PRINT NAME: F. P. [Signature] COMPANY/TITLE: Eurofins Eaton Analytical DATE: 5-2-20 TIME: 1640

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 870644  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

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**Folder Comments**

N1 -LCS1 recovery for PFTA was slightly above the above method acceptance limits. LCS 2 was at 104 % recovery .LCS1/LCS2 RPD is acceptable. All other Batch QCs are acceptable. This target analyte was not detected in the sample. ND results are acceptable for compliance.

**Flags Legend:**

N1 - See case narrative.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202005120508      <u>LH-INF-20200512</u></b>						
05/19/2020 20:27	Alkalinity in CaCO3 units		200		mg/L	2.0
05/13/2020 08:09	Chloride		100	250	mg/L	5.0
05/13/2020 08:09	Nitrate as Nitrogen by IC		2.7	10	mg/L	1.0
05/13/2020 08:09	Nitrate as NO3 (calc)		12	45	mg/L	4.4
05/15/2020 00:27	Perfluorobutanesulfonic acid (PFBS)		0.0058		ug/L	0.0020
05/15/2020 00:27	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
05/15/2020 00:27	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
05/15/2020 00:27	Perfluorononanoic acid (PFNA)		0.0031		ug/L	0.0020
05/15/2020 00:27	Perfluorooctanesulfonic acid (PFOS)		0.034		ug/L	0.0020
05/15/2020 00:27	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
05/13/2020 08:09	Sulfate		170	250	mg/L	5.0
05/13/2020 08:09	Total Nitrate, Nitrite-N, CALC		2.7		mg/L	0.10
05/26/2020 21:59	Total Organic Carbon		0.66		mg/L	0.30
<b>202005120509      <u>LH-INF-DUP-20200512</u></b>						
05/15/2020 00:46	Perfluorobutanesulfonic acid (PFBS)		0.0059		ug/L	0.0020
05/15/2020 00:46	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
05/15/2020 00:46	Perfluorohexanoic acid (PFHxA)		0.0029		ug/L	0.0020
05/15/2020 00:46	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
05/15/2020 00:46	Perfluorooctanesulfonic acid (PFOS)		0.033		ug/L	0.0020
05/15/2020 00:46	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
<b>202005120518      <u>MB-INF-20200512</u></b>						
05/18/2020 23:11	Alkalinity in CaCO3 units		170		mg/L	2.0
05/13/2020 07:56	Chloride		53	250	mg/L	2.5
05/13/2020 07:56	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
05/13/2020 07:56	Nitrate as NO3 (calc)		10	45	mg/L	2.2
05/15/2020 02:12	Perfluorobutanesulfonic acid (PFBS)		0.0088		ug/L	0.0020
05/15/2020 02:12	Perfluorodecanoic acid (PFDA)		0.0020		ug/L	0.0020
05/15/2020 02:12	Perfluoroheptanoic acid (PFHpA)		0.0033		ug/L	0.0020
05/15/2020 02:12	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
05/15/2020 02:12	Perfluorohexanoic acid (PFHxA)		0.0045		ug/L	0.0020
05/15/2020 02:12	Perfluorononanoic acid (PFNA)		0.0034		ug/L	0.0020
05/15/2020 02:12	Perfluorooctanesulfonic acid (PFOS)		0.033		ug/L	0.0020
05/15/2020 02:12	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
05/13/2020 07:56	Sulfate		80	250	mg/L	2.5
05/13/2020 07:56	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
Fax: (626) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Report:** 870644  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

Samples Received on:  
05/12/2020 1340

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
05/26/2020 23:59	Total Organic Carbon		0.59		mg/L	0.30

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20200512 (202005120500)</b>					<b>Sampled on 05/12/2020 0925</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	13C2-PFDA	80	%		1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	13C2-PFHxA	85	%		1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	136	%		1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	77	%		1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	108	%		1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	109	%		1

<b>GAC-2-20200512 (202005120501)</b>					<b>Sampled on 05/12/2020 0928</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	13C2-PFDA	99	%		1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	13C2-PFHxA	106	%		1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	93	%		1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	109	%		1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**GAC-3-20200512 (202005120502)**

Sampled on 05/12/2020 0931

**EPA 537.1 - EPA Method 537.1**

05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	13C2-PFDA	101	%		1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	13C2-PFHxA	111	%		1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	97	%		1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	110	%		1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	111	%		1

**GAC-4-20200512 (202005120503)**

Sampled on 05/12/2020 0934

**EPA 537.1 - EPA Method 537.1**

05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	13C2-PFDA	98	%		1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	13C2-PFHxA	107	%		1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	95	%		1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	108	%		1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	106	%		1

**IX-1-20200512 (202005120504)**

Sampled on 05/12/2020 0937

**EPA 537.1 - EPA Method 537.1**

05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	13C2-PFDA	105	%		1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	13C2-PFHxA	112	%		1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	102	%		1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	109	%		1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	111	%		1

**IX-2-20200512 (202005120505)**

**Sampled on 05/12/2020 0940**

**EPA 537.1 - EPA Method 537.1**

05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	13C2-PFDA	108	%		1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	13C2-PFHxA	114	%		1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	106	%		1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	113	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	110	%		1
<b>IX-3-20200512 (202005120506)</b>					<b>Sampled on 05/12/2020 0943</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	13C2-PFDA	108	%		1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	13C2-PFHxA	113	%		1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	105	%		1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	112	%		1

**IX-4-20200512 (202005120507)**

**Sampled on 05/12/2020 0946**

**EPA 537.1 - EPA Method 537.1**

05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	13C2-PFDA	105	%		1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	13C2-PFHxA	114	%		1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	105	%		1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	112	%		1

**LH-INF 20200512 (202005120508)**

Sampled on 05/12/2020 0949

**SM 5310C - Total Organic Carbon**

05/26/20 21:59	1251244	(SM 5310C)	Total Organic Carbon	0.66	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

05/13/20 08:09	1248080	(EPA 300.0)	Nitrate as Nitrogen by IC	2.7	mg/L	1.0	10
05/13/20 08:09	1248080	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	4.4	10
05/13/20 08:09	1248080	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.12	10
05/13/20 08:09	1248080	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.7	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

05/13/20 08:09	1248084	(EPA 300.0)	Chloride	100	mg/L	5.0	10
05/13/20 08:09	1248084	(EPA 300.0)	Sulfate	170	mg/L	5.0	10

**EPA 537.1 - EPA Method 537.1**

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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0058	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0031	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.034	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	13C2-PFDA	121	%		1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	13C2-PFHxA	116	%		1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	110	%		1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	122	%		1

**SM 2320B - Alkalinity in CaCO3 units**

05/19/20 20:27	1249662	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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**LH-INF-DUP-20200512 (202005120509)**

Sampled on 05/12/2020 0950

**EPA 537.1 - EPA Method 537.1**

05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0059	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0029	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.033	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	13C2-PFDA	105	%		1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	13C2-PFHxA	106	%		1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	99	%		1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	118	%		1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	115	%		1

**GAC-5-20200512 (202005120510)**

Sampled on 05/12/2020 1131

**EPA 537.1 - EPA Method 537.1**

05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	13C2-PFDA	193	%		1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	13C2-PFHxA	195	%		1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	181	%		1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	115	%		1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	190	%		1

**GAC-6-20200512 (202005120511)**

Sampled on 05/12/2020 1134

**EPA 537.1 - EPA Method 537.1**

05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	13C2-PFDA	106	%		1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	13C2-PFHxA	109	%		1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	99	%		1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	115	%		1

**GAC-7-20200512 (202005120512)**

Sampled on 05/12/2020 1137

**EPA 537.1 - EPA Method 537.1**

05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	13C2-PFDA	103	%		1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	13C2-PFHxA	109	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	99	%		1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	113	%		1

**GAC-8-20200512 (202005120513)**

**Sampled on 05/12/2020 1140**

**EPA 537.1 - EPA Method 537.1**

05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	13C2-PFDA	108	%		1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	13C2-PFHxA	113	%		1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	100	%		1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	111	%		1

**IX-5-20200512 (202005120514)**

**Sampled on 05/12/2020 1143**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 537.1 - EPA Method 537.1</b>									
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	11-chloro-eicos-afluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	13C2-PFDA	117	%		1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	13C2-PFHxA	110	%		1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	106	%		1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	114	%		1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	117	%		1

**IX-6-20200512 (202005120515)**

**Sampled on 05/12/2020 1146**

<b>EPA 537.1 - EPA Method 537.1</b>									
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	11-chloro-eicos-afluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	13C2-PFDA	109	%		1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	13C2-PFHxA	106	%		1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	102	%		1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	119	%		1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	107	%		1

**IX-7-20200512 (202005120516)**

Sampled on 05/12/2020 1149

**EPA 537.1 - EPA Method 537.1**

05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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**Water Replenishment District**  
 Joseph Liles  
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 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	13C2-PFDA	99	%		1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	13C2-PFHxA	98	%		1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	94	%		1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	119	%		1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	106	%		1

**IX-8-20200512 (202005120517)**

Sampled on 05/12/2020 1152

**EPA 537.1 - EPA Method 537.1**

05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

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 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	13C2-PFDA	104	%		1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	13C2-PFHxA	105	%		1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	98	%		1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	115	%		1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	109	%		1

**MB-INF-20200512 (202005120518)**

Sampled on 05/12/2020 1155

**SM 5310C - Total Organic Carbon**

05/26/20 23:59	1251244	(SM 5310C)	Total Organic Carbon	0.59	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

05/13/20 07:56	1248080	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
05/13/20 07:56	1248080	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5
05/13/20 07:56	1248080	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
05/13/20 07:56	1248080	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

05/13/20 07:56	1248084	(EPA 300.0)	Chloride	53	mg/L	2.5	5
05/13/20 07:56	1248084	(EPA 300.0)	Sulfate	80	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0088	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0020	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1

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 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0045	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0034	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.033	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	13C2-PFDA	122	%		1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	13C2-PFHxA	115	%		1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	111	%		1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	116	%		1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	119	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	05/18/20 23:11		1249366	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1

**FB-20200512 (202005120519)**

**Sampled on 05/12/2020 1158**

**EPA 537.1 - EPA Method 537.1**

05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

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 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	13C2-PFDA	109	%		1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	13C2-PFHxA	120	%		1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	13C3-HFPO-DA	100	%		1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	d3-NMeFOSAA	83	%		1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	d5-NEtFOSAA	122	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1248080**

202005120508 LH-INF 20200512  
 202005120518 MB-INF-20200512

**Analysis Date: 05/13/2020**

Analyzed by: B9PD  
 Analyzed by: B9PD

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1248084**

202005120508 LH-INF 20200512  
 202005120518 MB-INF-20200512

**Analysis Date: 05/13/2020**

Analyzed by: B9PD  
 Analyzed by: B9PD

**EPA Method 537.1**

**Prep Batch: 1248203 Analytical Batch: 1248833**

202005120500 GAC-1-20200512  
 202005120501 GAC-2-20200512  
 202005120502 GAC-3-20200512  
 202005120503 GAC-4-20200512  
 202005120504 IX-1-20200512  
 202005120505 IX-2-20200512  
 202005120506 IX-3-20200512  
 202005120507 IX-4-20200512  
 202005120508 LH-INF 20200512  
 202005120509 LH-INF-DUP-20200512  
 202005120510 GAC-5-20200512  
 202005120511 GAC-6-20200512  
 202005120512 GAC-7-20200512  
 202005120513 GAC-8-20200512  
 202005120514 IX-5-20200512  
 202005120515 IX-6-20200512  
 202005120516 IX-7-20200512  
 202005120517 IX-8-20200512  
 202005120518 MB-INF-20200512

**Analysis Date: 05/14/2020**

Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
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 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM

**Alkalinity in CaCO3 units**

**Analytical Batch: 1249366**

202005120518 MB-INF-20200512

**Analysis Date: 05/18/2020**

Analyzed by: ZBZZ

**Alkalinity in CaCO3 units**

**Analytical Batch: 1249662**

202005120508 LH-INF 20200512

**Analysis Date: 05/19/2020**

Analyzed by: ZBZZ

**Total Organic Carbon**

**Analytical Batch: 1251244**

202005120508 LH-INF 20200512  
 202005120518 MB-INF-20200512

**Analysis Date: 05/26/2020**

Analyzed by: ZS6I  
 Analyzed by: ZS6I

**EPA Method 537.1**

**Prep Batch: 1250864 Analytical Batch: 1251473**

202005120519 FB-20200512

**Analysis Date: 05/27/2020**

Analyzed by: SZZ

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Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1248080</b>					<b>Analysis Date: 05/13/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.50	mg/L	100	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.53	mg/L	101	(90-110)	20	1.2
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0553	mg/L	111	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0114	mg/L	91	(50-150)		
MS_202005120495	Nitrate as Nitrogen by IC	1.4	6.5	8.33	mg/L	111	(80-120)		
MS_202005120610	Nitrate as Nitrogen by IC	ND	6.5	6.70	mg/L	107	(80-120)		
MSD_202005120495	Nitrate as Nitrogen by IC	1.4	6.5	8.25	mg/L	109	(80-120)	20	0.97
MSD_202005120610	Nitrate as Nitrogen by IC	ND	6.5	6.72	mg/L	108	(80-120)	20	0.36
LCS1	Nitrite Nitrogen by IC		1	0.997	mg/L	100	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.00	mg/L	101	(90-110)	20	1.3
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0506	mg/L	101	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0120	mg/L	96	(50-150)		
MS_202005120495	Nitrite Nitrogen by IC	ND	2.5	2.53	mg/L	101	(80-120)		
MS_202005120610	Nitrite Nitrogen by IC	ND	2.5	2.41	mg/L	96	(80-120)		
MSD_202005120495	Nitrite Nitrogen by IC	ND	2.5	2.50	mg/L	100	(80-120)	20	1.1
MSD_202005120610	Nitrite Nitrogen by IC	ND	2.5	2.39	mg/L	96	(80-120)	20	0.75
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1248084</b>					<b>Analysis Date: 05/13/2020</b>				
LCS1	Chloride		25	25.8	mg/L	103	(90-110)		
LCS2	Chloride		25	26.0	mg/L	104	(90-110)	20	0.77
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.461	mg/L	92	(50-150)		
MS_202005120495	Chloride	94	65	167	mg/L	115	(80-120)		
MS_202005120610	Chloride	230	62.5	ND	mg/L				
MSD_202005120495	Chloride	94	65	165	mg/L	112	(80-120)	20	1.0
MSD_202005120610	Chloride	230	62.5	ND	mg/L				
LCS1	Sulfate		50	51.0	mg/L	102	(90-110)		
LCS2	Sulfate		50	51.4	mg/L	103	(90-110)	20	0.78
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.991	mg/L	99	(50-150)		
MRL_W	Sulfate		0.25	0.244	mg/L	97	(50-150)		
MS_202005120495	Sulfate	100	125	243	mg/L	113	(80-120)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202005120610	Sulfate	6.8	125	143	mg/L	109	(80-120)		
MSD_202005120495	Sulfate	100	125	240	mg/L	111	(80-120)	20	0.89
MSD_202005120610	Sulfate	6.8	125	144	mg/L	110	(80-120)	20	0.45

EPA Method 537.1 by EPA 537.1

Analytical Batch: 1248833

Analysis Date: 05/14/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0235	ug/L	100	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0233	ug/L	99	(70-130)	30	1.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00183	ug/L	97	(50-150)		
MS_202005110065	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00165	ug/L	87	(50-150)		
MSD_202005110065	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00180	ug/L	95	(50-150)	50	8.9
LCS1	13C2-PFDA (S)		100	118	%	118	(70-130)		
LCS2	13C2-PFDA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFDA (S)			100	%	100	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	95.0	%	95	(70-130)		
MS_202005110065	13C2-PFDA (S)		100	100	%	100	(70-130)		
MSD_202005110065	13C2-PFDA (S)		100	106	%	106	(70-130)		
LCS1	13C2-PFHxA (S)		100	120	%	120	(70-130)		
LCS2	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFHxA (S)			104	%	104	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	103	%	103	(70-130)		
MS_202005110065	13C2-PFHxA (S)		100	108	%	108	(70-130)		
MSD_202005110065	13C2-PFHxA (S)		100	114	%	114	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	94.3	%	94	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			106	%	107	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS_202005110065	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MSD_202005110065	13C2-PFOA- IS#1 (I)		100	104	%	105	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	93.9	%	94	(70-130)		
MBLK	13C3-HFPO-DA (S)			93.1	%	93	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	95.8	%	96	(70-130)		
MS_202005110065	13C3-HFPO-DA (S)		100	94.1	%	94	(70-130)		
MSD_202005110065	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	98.8	%	99	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C4-PFOS- IS#2 (I)			107	%	107	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	99.5	%	99	(50-150)		
MS_202005110065	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
MSD_202005110065	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0282	ug/L	119	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0249	ug/L	105	(70-130)	30	12
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00211	ug/L	112	(50-150)		
MS_202005110065	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00200	ug/L	106	(50-150)		
MSD_202005110065	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00203	ug/L	107	(50-150)	50	1.3
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0272	ug/L	117	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0254	ug/L	109	(70-130)	30	6.1
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00211	ug/L	113	(50-150)		
MS_202005110065	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00184	ug/L	99	(50-150)		
MSD_202005110065	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00200	ug/L	107	(50-150)	50	8.2
LCS1	d3-NMeFOSAA (I)		100	122	%	122	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
MBLK	d3-NMeFOSAA (I)			106	%	106	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MS_202005110065	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
MSD_202005110065	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
MBLK	d5-NEtFOSAA (S)			99.3	%	99	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	102	%	103	(70-130)		
MS_202005110065	d5-NEtFOSAA (S)		100	103	%	103	(70-130)		
MSD_202005110065	d5-NEtFOSAA (S)		100	110	%	110	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0231	ug/L	92	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0214	ug/L	86	(70-130)	30	7.2
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00173	ug/L	86	(50-150)		
MS_202005110065	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00169	ug/L	84	(50-150)		
MSD_202005110065	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00176	ug/L	88	(50-150)	50	4.2
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0271	ug/L	108	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0262	ug/L	105	(70-130)	30	3.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00222	ug/L	111	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202005110065	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00238	ug/L	117	(50-150)		
MSD_202005110065	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00228	ug/L	112	(50-150)	50	4.3
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0269	ug/L	108	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0264	ug/L	106	(70-130)	30	2.3
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00230	ug/L	115	(50-150)		
MS_202005110065	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00224	ug/L	110	(50-150)		
MSD_202005110065	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00221	ug/L	109	(50-150)	50	1.5
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0267	ug/L	120	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0253	ug/L	115	(70-130)	30	6.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00210	ug/L	119	(50-150)		
MS_202005110065	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00220	ug/L	123	(50-150)		
MSD_202005110065	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00201	ug/L	112	(50-150)	50	8.9
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0254	ug/L	102	(70-130)	30	13
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202005110065	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00211	ug/L	104	(50-150)		
MSD_202005110065	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00220	ug/L	108	(50-150)	50	4.0
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0281	ug/L	112	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0233	ug/L	93	(70-130)	30	18
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00199	ug/L	100	(50-150)		
MS_202005110065	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00196	ug/L	97	(50-150)		
MSD_202005110065	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00195	ug/L	97	(50-150)	50	0.47
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0309	ug/L	124	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0276	ug/L	110	(70-130)	30	12
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00253	ug/L	126	(50-150)		
MS_202005110065	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00232	ug/L	115	(50-150)		
MSD_202005110065	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00231	ug/L	114	(50-150)	50	0.52
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0253	ug/L	111	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0249	ug/L	109	(70-130)	30	0.40
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00206	ug/L	113	(50-150)		
MS_202005110065	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00197	ug/L	108	(50-150)		
MSD_202005110065	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00201	ug/L	110	(50-150)	50	1.8

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0304	ug/L	121	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0266	ug/L	106	(70-130)	30	12
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00249	ug/L	125	(50-150)		
MS_202005110065	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00230	ug/L	112	(50-150)		
MSD_202005110065	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00236	ug/L	115	(50-150)	50	2.7
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0302	ug/L	121	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0263	ug/L	105	(70-130)	30	13
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00229	ug/L	115	(50-150)		
MS_202005110065	Perfluorononanoic acid (PFNA)	ND	0.002	0.00225	ug/L	112	(50-150)		
MSD_202005110065	Perfluorononanoic acid (PFNA)	ND	0.002	0.00221	ug/L	110	(50-150)	50	2.0
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0243	ug/L	105	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0256	ug/L	110	(70-130)	30	6.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00223	ug/L	121	(50-150)		
MS_202005110065	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00209	ug/L	109	(50-150)		
MSD_202005110065	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00210	ug/L	110	(50-150)	50	0.53
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0296	ug/L	119	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0276	ug/L	111	(70-130)	30	8.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00245	ug/L	122	(50-150)		
MS_202005110065	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00242	ug/L	116	(50-150)		
MSD_202005110065	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00241	ug/L	115	(50-150)	50	0.56
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0340	ug/L	<b>136</b>	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0259	ug/L	104	(70-130)	30	27
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00205	ug/L	102	(50-150)		
MS_202005110065	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00205	ug/L	101	(50-150)		
MSD_202005110065	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00208	ug/L	103	(50-150)	50	1.5
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0308	ug/L	123	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0253	ug/L	101	(70-130)	30	20
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00196	ug/L	98	(50-150)		
MS_202005110065	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00197	ug/L	97	(50-150)		
MSD_202005110065	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00206	ug/L	102	(50-150)	50	4.6
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0284	ug/L	114	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0257	ug/L	103	(70-130)	30	8.6

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00221	ug/L	111	(50-150)		
MS_202005110065	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00212	ug/L	105	(50-150)		
MSD_202005110065	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00216	ug/L	107	(50-150)	50	1.8

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1249366

Analysis Date: 05/18/2020

LCS1	Alkalinity in CaCO3 units		100	99.2	mg/L	99	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.3	mg/L	99	(90-110)	20	0.10
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.87	mg/L	94	(50-150)		
MS_202005110623	Alkalinity in CaCO3 units	230	100	233	mg/L	<u>0.120</u>	(80-120)		
MS_202005120352	Alkalinity in CaCO3 units	180	100	228	mg/L	<u>42</u>	(80-120)		
MSD_202005110623	Alkalinity in CaCO3 units	230	100	230	mg/L	<u>-2.17</u>	(80-120)	20	0.81
MSD_202005120352	Alkalinity in CaCO3 units	180	100	226	mg/L	<u>41</u>	(80-120)	20	0.75

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1249662

Analysis Date: 05/19/2020

LCS1	Alkalinity in CaCO3 units		100	100	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	100	mg/L	100	(90-110)	20	0.0
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.04	mg/L	102	(50-150)		
MS_202004270298	Alkalinity in CaCO3 units	240	100	328	mg/L	89	(80-120)		
MSD_202004270298	Alkalinity in CaCO3 units	240	100	333	mg/L	94	(80-120)	20	1.5

EPA Method 537.1 by EPA 537.1

Prep Batch: 1249488 Analytical Batch: 1250481

Analysis Date: 05/21/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0471	ND	ug/L				
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0471	ND	ug/L				
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.00188	ND	ug/L				
MS1_202005150020	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.02355	ND	ug/L				
MSD1_202005150020	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.02355	ND	ug/L				
LCS3	13C2-PFDA (S)		100	ND	%				
LCS4	13C2-PFDA (S)		100	ND	%				
MBLK	13C2-PFDA (S)			<130	%				
MRL_CHK	13C2-PFDA (S)		100	ND	%				
MS1_202005150020	13C2-PFDA (S)		100	ND	%				
MSD1_202005150020	13C2-PFDA (S)		100	ND	%				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	13C2-PFHxA (S)		100	ND	%				
LCS4	13C2-PFHxA (S)		100	ND	%				
MBLK	13C2-PFHxA (S)			<130	%				
MRL_CHK	13C2-PFHxA (S)		100	ND	%				
MS1_202005150020	13C2-PFHxA (S)		100	ND	%				
MSD1_202005150020	13C2-PFHxA (S)		100	ND	%				
LCS3	13C2-PFOA- IS#1 (I)		100	ND	%				
LCS4	13C2-PFOA- IS#1 (I)		100	ND	%				
MBLK	13C2-PFOA- IS#1 (I)			<150	%				
MRL_CHK	13C2-PFOA- IS#1 (I)		100	ND	%				
MS1_202005150020	13C2-PFOA- IS#1 (I)		100	ND	%				
MSD1_202005150020	13C2-PFOA- IS#1 (I)		100	ND	%				
LCS3	13C3-HFPO-DA (S)		100	ND	%				
LCS4	13C3-HFPO-DA (S)		100	ND	%				
MBLK	13C3-HFPO-DA (S)			<130	%				
MRL_CHK	13C3-HFPO-DA (S)		100	ND	%				
MS1_202005150020	13C3-HFPO-DA (S)		100	ND	%				
MSD1_202005150020	13C3-HFPO-DA (S)		100	ND	%				
LCS3	13C4-PFOS- IS#2 (I)		100	ND	%				
LCS4	13C4-PFOS- IS#2 (I)		100	ND	%				
MBLK	13C4-PFOS- IS#2 (I)			<150	%				
MRL_CHK	13C4-PFOS- IS#2 (I)		100	ND	%				
MS1_202005150020	13C4-PFOS- IS#2 (I)		100	ND	%				
MSD1_202005150020	13C4-PFOS- IS#2 (I)		100	ND	%				
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0485	ND	ug/L				
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0485	ND	ug/L				
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.00189	ND	ug/L				
MS1_202005150020	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.023625	ND	ug/L				
MSD1_202005150020	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.023625	ND	ug/L				
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0466	ND	ug/L				
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0466	ND	ug/L				
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.00186	ND	ug/L				
MS1_202005150020	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0233	ND	ug/L				
MSD1_202005150020	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0233	ND	ug/L				
LCS3	d3-NMeFOSAA (I)		100	ND	%				
LCS4	d3-NMeFOSAA (I)		100	ND	%				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 870644  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	d3-NMeFOSAA (I)			<150	%				
MRL_CHK	d3-NMeFOSAA (I)		100	ND	%				
MS1_202005150020	d3-NMeFOSAA (I)		100	ND	%				
MSD1_202005150020	d3-NMeFOSAA (I)		100	ND	%				
LCS3	d5-NEtFOSAA (S)		100	ND	%				
LCS4	d5-NEtFOSAA (S)		100	ND	%				
MBLK	d5-NEtFOSAA (S)			<130	%				
MRL_CHK	d5-NEtFOSAA (S)		100	ND	%				
MS1_202005150020	d5-NEtFOSAA (S)		100	ND	%				
MSD1_202005150020	d5-NEtFOSAA (S)		100	ND	%				
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	ND	ug/L				
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	ND	ug/L				
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	ND	ug/L				
MS1_202005150020	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	ND	ug/L				
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	ND	ug/L				
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	ND	ug/L				
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MS1_202005150020	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	ND	ug/L				
MSD1_202005150020	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	ND	ug/L				
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	ND	ug/L				
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	ND	ug/L				
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	ND	ug/L				
MS1_202005150020	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	ND	ug/L				
MSD1_202005150020	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	ND	ug/L				
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.04426	ND	ug/L				
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.04426	ND	ug/L				
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.00177	ND	ug/L				
MS1_202005150020	Perfluorobutanesulfonic acid (PFBS)	ND	0.02213	ND	ug/L				
MSD1_202005150020	Perfluorobutanesulfonic acid (PFBS)	ND	0.02213	ND	ug/L				
LCS3	Perfluorodecanoic acid (PFDA)		0.05	ND	ug/L				
LCS4	Perfluorodecanoic acid (PFDA)		0.05	ND	ug/L				
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	ND	ug/L				
MS1_202005150020	Perfluorodecanoic acid (PFDA)	ND	0.025	ND	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD1_202005150020	Perfluorodecanoic acid (PFDA)	ND	0.025	ND	ug/L				
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	ND	ug/L				
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	ND	ug/L				
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	ND	ug/L				
MS1_202005150020	Perfluorododecanoic acid (PFDoA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluorododecanoic acid (PFDoA)	ND	0.025	ND	ug/L				
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	ND	ug/L				
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	ND	ug/L				
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	ND	ug/L				
MS1_202005150020	Perfluoroheptanoic acid (PFHpA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluoroheptanoic acid (PFHpA)	ND	0.025	ND	ug/L				
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.0456	ND	ug/L				
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.0456	ND	ug/L				
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.001824	ND	ug/L				
MS1_202005150020	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0228	ND	ug/L				
MSD1_202005150020	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0228	ND	ug/L				
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	ND	ug/L				
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	ND	ug/L				
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	ND	ug/L				
MS1_202005150020	Perfluorohexanoic acid (PFHxA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluorohexanoic acid (PFHxA)	ND	0.025	ND	ug/L				
LCS3	Perfluorononanoic acid (PFNA)		0.05	ND	ug/L				
LCS4	Perfluorononanoic acid (PFNA)		0.05	ND	ug/L				
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	ND	ug/L				
MS1_202005150020	Perfluorononanoic acid (PFNA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluorononanoic acid (PFNA)	ND	0.025	ND	ug/L				
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.04628	ND	ug/L				
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.04628	ND	ug/L				
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.001851	ND	ug/L				
MS1_202005150020	Perfluorooctanesulfonic acid (PFOS)	ND	0.02314	ND	ug/L				
MSD1_202005150020	Perfluorooctanesulfonic acid (PFOS)	ND	0.02314	ND	ug/L				
LCS3	Perfluorooctanoic acid (PFOA)		0.05	ND	ug/L				

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorooctanoic acid (PFOA)		0.05	ND	ug/L				
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	ND	ug/L				
MS1_202005150020	Perfluorooctanoic acid (PFOA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluorooctanoic acid (PFOA)	ND	0.025	ND	ug/L				
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	ND	ug/L				
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	ND	ug/L				
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	ND	ug/L				
MS1_202005150020	Perfluorotetradecanoic acid (PFTA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluorotetradecanoic acid (PFTA)	ND	0.025	ND	ug/L				
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	ND	ug/L				
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	ND	ug/L				
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	ND	ug/L				
MS1_202005150020	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	ND	ug/L				
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	ND	ug/L				
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	ND	ug/L				
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	ND	ug/L				
MS1_202005150020	Perfluoroundecanoic acid (PFUnA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluoroundecanoic acid (PFUnA)	ND	0.025	ND	ug/L				

**Total Organic Carbon by SM 5310C**

**Analytical Batch: 1251244**

**Analysis Date: 05/26/2020**

LCS1	Total Organic Carbon		5	4.84	mg/L	97	(90-110)		
LCS2	Total Organic Carbon		5	5.08	mg/L	102	(90-110)	20	4.8
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.239	mg/L	119	(50-150)		
MS_202005150238	Total Organic Carbon	2.3	4	6.20	mg/L	97	(80-120)		
MS2_202005150240	Total Organic Carbon	3.1	2	5.22	mg/L	105	(80-120)		
MSD_202005150238	Total Organic Carbon	2.3	4	6.26	mg/L	99	(80-120)	20	1.2
MSD2_202005150240	Total Organic Carbon	3.1	2	5.10	mg/L	99	(80-120)	20	2.3

**EPA Method 537.1 by EPA 537.1**

**Prep Batch: 1250864 Analytical Batch: 1251473**

**Analysis Date: 05/27/2020**

DUP_202005230042	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0227	ug/L	96	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0224	ug/L	95	(70-130)	30	1.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00173	ug/L	92	(50-150)		
MS_202005230040	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00159	ug/L	84	(50-150)		
DUP_202005230042	13C2-PFDA (S)			124	%	124	(70-130)		
LCS1	13C2-PFDA (S)		100	122	%	123	(70-130)		
LCS2	13C2-PFDA (S)		100	120	%	120	(70-130)		
MBLK	13C2-PFDA (S)			116	%	116	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	110	%	110	(70-130)		
MS_202005230040	13C2-PFDA (S)		100	117	%	117	(70-130)		
DUP_202005230042	13C2-PFHxA (S)			71.7	%	72	(70-130)		
LCS1	13C2-PFHxA (S)		100	121	%	121	(70-130)		
LCS2	13C2-PFHxA (S)		100	122	%	122	(70-130)		
MBLK	13C2-PFHxA (S)			125	%	125	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	111	%	111	(70-130)		
MS_202005230040	13C2-PFHxA (S)		100	125	%	125	(70-130)		
DUP_202005230042	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			112	%	112	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	115	%	115	(50-150)		
MS_202005230040	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
DUP_202005230042	13C3-HFPO-DA (S)			78.3	%	78	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
MBLK	13C3-HFPO-DA (S)			115	%	115	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	98.7	%	99	(70-130)		
MS_202005230040	13C3-HFPO-DA (S)		100	118	%	118	(70-130)		
DUP_202005230042	13C4-PFOS- IS#2 (I)			109	%	109	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	108	%	108	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			108	%	108	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	108	%	108	(50-150)		
MS_202005230040	13C4-PFOS- IS#2 (I)		100	109	%	109	(50-150)		
DUP_202005230042	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0246	ug/L	104	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0259	ug/L	109	(70-130)	30	5.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00213	ug/L	113	(50-150)		
MS_202005230040	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00220	ug/L	116	(50-150)		
DUP_202005230042	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0250	ug/L	107	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0248	ug/L	106	(70-130)	30	0.80
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00201	ug/L	108	(50-150)		
MS_202005230040	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00179	ug/L	96	(50-150)		
DUP_202005230042	d3-NMeFOSAA (I)			108	%	108	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MBLK	d3-NMeFOSAA (I)			105	%	105	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MS_202005230040	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
DUP_202005230042	d5-NEtFOSAA (S)			103	%	103	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
MBLK	d5-NEtFOSAA (S)			119	%	119	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
MS_202005230040	d5-NEtFOSAA (S)		100	116	%	116	(70-130)		
DUP_202005230042	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0213	ug/L	85	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0225	ug/L	90	(70-130)	30	5.5
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00185	ug/L	93	(50-150)		
MS_202005230040	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00206	ug/L	103	(50-150)		
DUP_202005230042	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0268	ug/L	107	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0275	ug/L	110	(70-130)	30	2.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00241	ug/L	121	(50-150)		
MS_202005230040	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00234	ug/L	115	(50-150)		
DUP_202005230042	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0283	ug/L	113	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0281	ug/L	112	(70-130)	30	0.71
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00243	ug/L	121	(50-150)		
MS_202005230040	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00233	ug/L	114	(50-150)		

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Report: 870644  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202005230042	Perfluorobutanesulfonic acid (PFBS)	0.062		0.0570	ug/L		(0-30)	30	9.0
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0252	ug/L	114	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0249	ug/L	113	(70-130)	30	1.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00211	ug/L	119	(50-150)		
MS_202005230040	Perfluorobutanesulfonic acid (PFBS)	0.011	0.0018	0.0131	ug/L	130	(50-150)		
DUP_202005230042	Perfluorodecanoic acid (PFDA)	0.0049		0.00655	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0275	ug/L	110	(70-130)	30	2.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00225	ug/L	113	(50-150)		
MS_202005230040	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00237	ug/L	115	(50-150)		
DUP_202005230042	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0256	ug/L	102	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0260	ug/L	104	(70-130)	30	1.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00199	ug/L	99	(50-150)		
MS_202005230040	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00209	ug/L	103	(50-150)		
DUP_202005230042	Perfluoroheptanoic acid (PFHpA)	0.10		0.0973	ug/L		(0-30)	30	2.7
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0293	ug/L	117	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0289	ug/L	116	(70-130)	30	1.4
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00256	ug/L	128	(50-150)		
MS_202005230040	Perfluoroheptanoic acid (PFHpA)	0.014	0.002	0.0167	ug/L	<b>158</b>	(50-150)		
DUP_202005230042	Perfluorohexanesulfonic acid (PFHxS)	0.095		0.107	ug/L		(0-30)	30	16
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0271	ug/L	119	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0263	ug/L	115	(70-130)	30	3.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00215	ug/L	118	(50-150)		
MS_202005230040	Perfluorohexanesulfonic acid (PFHxS)	0.0079	0.0018	0.00998	ug/L	113	(50-150)		
DUP_202005230042	Perfluorohexanoic acid (PFHxA)	0.17		0.121	ug/L		(0-30)	30	16
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0295	ug/L	118	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0289	ug/L	116	(70-130)	30	2.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00243	ug/L	122	(50-150)		
MS_202005230040	Perfluorohexanoic acid (PFHxA)	0.020	0.002	0.0227	ug/L	130	(50-150)		
DUP_202005230042	Perfluorononanoic acid (PFNA)	0.0078		0.0108	ug/L		(0-30)	30	<b>32</b>
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0281	ug/L	112	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0284	ug/L	114	(70-130)	30	1.1
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00231	ug/L	116	(50-150)		
MS_202005230040	Perfluorononanoic acid (PFNA)	ND	0.002	0.00275	ug/L	118	(50-150)		
DUP_202005230042	Perfluorooctanesulfonic acid (PFOS)	0.23		0.334	ug/L		(0-30)	30	<b>33</b>
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0259	ug/L	112	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0259	ug/L	112	(70-130)	30	0.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00214	ug/L	115	(50-150)		
MS_202005230040	Perfluorooctanesulfonic acid (PFOS)	0.016	0.0019	0.0186	ug/L	119	(50-150)		
DUP_202005230042	Perfluorooctanoic acid (PFOA)	0.28		0.363	ug/L		(0-30)	30	25
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0290	ug/L	116	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0285	ug/L	114	(70-130)	30	1.7
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00240	ug/L	120	(50-150)		
MS_202005230040	Perfluorooctanoic acid (PFOA)	0.039	0.002	0.0421	ug/L	<b>162</b>	(50-150)		
DUP_202005230042	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0273	ug/L	109	(70-130)	30	1.1
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202005230040	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00206	ug/L	101	(50-150)		
DUP_202005230042	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0253	ug/L	101	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0256	ug/L	103	(70-130)	30	1.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00203	ug/L	102	(50-150)		
MS_202005230040	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00202	ug/L	99	(50-150)		
DUP_202005230042	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0263	ug/L	105	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0277	ug/L	111	(70-130)	30	5.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00221	ug/L	111	(50-150)		
MS_202005230040	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00218	ug/L	107	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



**Non-Compliance Report of Analysis by 18-Hour Colilert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 05/31/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 05/31/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for  
Presence or Absence, Quantification of Total Coliform and E. Coli  
By Quantitray**

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 05/31/2020

Quant Report - Page 1 of 1

, Tel Fax

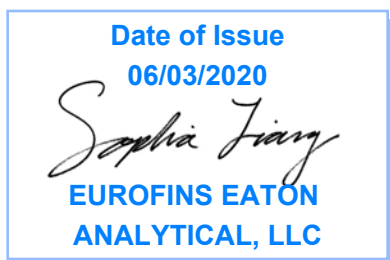
750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)



## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 871876  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report,

Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

### STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			



### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 871876  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **May 19, 2020 at 1405**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202005190374	GAC-1-20200519 Static ID: 537.1 @537.1	05/19/2020 1052
202005190375	GAC-2-20200519 Static ID: 537.1 @537.1	05/19/2020 1055
202005190376	GAC-3-20200519 Static ID: 537.1 @537.1	05/19/2020 1058
202005190377	GAC-4-20200519 Static ID: 537.1 @537.1	05/19/2020 1101
202005190378	IX-1-20200519 Static ID: 537.1 @537.1	05/19/2020 1104
202005190379	IX-2-20200519 Static ID: 537.1 @537.1	05/19/2020 1107
202005190380	IX-3-20200519 Static ID: 537.1 @537.1	05/19/2020 1110
202005190381	IX-4-20200519 @537.1	05/19/2020 1113
202005190382	LH-INF-20200519 @537.1 Chloride	05/19/2020 1116
	@ANIONS48 Sulfate	Alkalinity in CaCO3 units Total Organic Carbon
202005190383	GAC-5-20200519 @537.1	05/19/2020 1252
202005190384	GAC-6-20200519 @537.1	05/19/2020 1255
202005190385	GAC-7-20200519	05/19/2020 1258

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 871876  
Project: 0250000  
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

The following samples were received from you on **May 19, 2020 at 1405**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202005190386	GAC-8-20200519	05/19/2020 1301
	@537.1	
202005190387	IX-5-20200519	05/19/2020 1304
	@537.1	
202005190388	IX-6-20200519	05/19/2020 1307
	@537.1	
202005190389	IX-7-20200519	05/19/2020 1310
	@537.1	
202005190390	IX-8-20200519	05/19/2020 1313
	@537.1	
202005190391	MB-INF-20200519	05/19/2020 1316
	@537.1	
	Chloride	@ANIONS48 Alkalinity in CaCO3 units
		Sulfate Total Organic Carbon
202005190392	FB-20200519	05/19/2020 1320
	@537.1 FB	

#### Test Description

- @537.1 -- EPA Method 537.1
- @537.1 FB -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0

871816

<b>FROM:</b> GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		<b>PROJECT NAME:</b> WRD Pilot								
<b>TEL:</b> (949) 679-1070		<b>PROJECT CONTACT:</b> Miae Jeon								
<b>E-MAIL:</b> mjeon@gsi-net.com		<b>GLOBAL ID:</b>								
<b>LABORATORY:</b> Eurofins Eaton Analytical		<b>PROJECT NO.:</b> 5302								
<b>TURNAROUND TIME:</b> <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		<b>LAB CONTACT:</b> Sophia Liang								
<b>SPECIAL INSTRUCTIONS:</b> Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results		<b>SAMPLER(S): (PRINT)</b> RDT								
<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.										
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME							
	GAC-1 - 20200519	5-19	1052	Water	2	Unpreserved	X			
	GAC-2 - 20200519		1055	Water	2	Preserved	X			
	GAC-3 - 20200519		1058	Water	2	Unpreserved	X			
	GAC-4 - 20200519		1101	Water	2	Unpreserved	X			
	IX-1 - 20200519		1104	Water	2	Unpreserved	X			
	IX-2 - 20200519		1107	Water	2	Unpreserved	X			
	IX-3 - 20200519		1110	Water	2	Unpreserved	X			
	IX-4 - 20200519		1113	Water	2	Unpreserved	X			
	LH-INF-20200519		1116	Water	5	Unpreserved	X	X	X	
	LH-INF-DUP			Water		Unpreserved				
	GAC-5 - 20200519	5-19	1252	Water	2	Unpreserved	X			
	GAC-6 - 20200519		1255	Water	2	Unpreserved	X			
	GAC-7 - 20200519		1258	Water	2	Unpreserved	X			
	GAC-8 - 20200519		1301	Water	2	Unpreserved	X			
Relinquished by: (Signature) <i>RDT Torres</i>						Received by: (Signature)	Date: <u>5-19</u> Time: <u>1405</u>			
Relinquished by: (Signature)						Received by: (Signature)	Date: _____    Time: _____			
Relinquished by: (Signature)						Received by: (Signature)	Date: _____    Time: _____			

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302										
E-MAIL: mjeon@gsi-net.com		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang										
LABORATORY: Eurofins Eaton Analytical		GLOBAL ID:		SAMPLER(S): (PRINT) <b>RDT</b>										
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.												
SPECIAL INSTRUCTIONS: Send report copies to pegalwin@gsi-net.com, mjeon@gsi-net.com, & rdorres@gsi-net.com; Provide EDD of sample results														
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Filtered	Preserved	Unpreserved	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	HOLD	
		DATE	TIME											
	IX-5-20200519	5-19	1304	Water					X					
	IX-6-20200519	↓	1307	Water					X					
	IX-7-20200519		1310	Water					X					
	IX-8-20200519		1313	Water					X					
	MB-INF-20200519		1316	Water					X					
	MB-INF-DUP			Water										
	FB-20200519	5-19	1320	Water					X					
Relinquished by: (Signature) <i>[Signature]</i> 2025						Received by: (Signature) <i>[Signature]</i> 5-19-20 1405						Date: 5-19-20	Time: 1405	
Relinquished by: (Signature)						Received by: (Signature)						Date:	Time:	
Relinquished by: (Signature)						Received by: (Signature)						Date:	Time:	



Eaton Analytical

Kit Order for Water Replenishment District

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
(626) 386-1100 FAX (866) 988-3757

Created Date & Time: 4/30/2020 1:05:49PM

Note: Sampler Please return this paper with your samples

Kit #: 262925

Created By: Sophia F Liang - [SFL]  
Deliver By: 05/11/2020

STG: Bottle Orders  
Ice Type: G

Pre Registered

Client ID: WRD

Project Code: 0250000 Bottle Orders  
Group Name: WRD Pilot (Set #2)  
PO#/JOB#:

Description: WRD Pilot Set #2  
Shipping Method: Pickup by client

Ship Sample Kits to  
GSI Environmental Inc.  
Attn: Robert Torres  
Phone: 951-616-8406

Send Report to  
Water Replenishment District  
4040 Paramount Blvd  
Lakewood, CA 90712  
Attn: Joseph Liles  
Phone: 562-275-4226

Billing Address  
Water Replenishment District  
Attn: Eurofins Calscience  
Water Replenishment District  
4040 Paramount Blvd  
Lakewood, CA 90712  
Attn: Brian Partington  
Phone: 562-275-4249  
Fax: 562-921-6101

# of Sample Tests	Bottle Qty	Type [ preservative Information ]	Total	UN DOT #
4	1 - 125ml	amber glass [ 0.5 ml H2SO4 (50%) ]	4	UN1830
4	@	ANIONS48, Chloride, Sulfate	4	
4	Alkalinity in CaCO3 units		4	
40	@537.1		80	
2	@537.1 TB		2	
2	@537.1 FB		2	
<b>Sum Tests: 56</b>			<b>Sum Bottles: 96</b>	

Comments

SHIPPING:  
 - CLIENT P/U TUESDAY, MAY 12TH @ 1PM  
 - PACKAGE IN 4 COOLERS

GSI SAMPLER:  
 - PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COC ALONG WITH THE SAMPLES.  
 - NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP.

ASM:  
 \*Please also send invoices to Miae Jeon (mjeon@gst-net.com)  
 \*Report copies to be sent to Miae Jeon, mjeon@gst-net.com, Pat Galvin, pgalvin@gst-net.com, and rdtores@gst-net.com.

Code      Status      Date Shipped      Via      Tracking #      # of Coolers      Prepared By

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: SASBP

**SAMPLE TEMP RECEIVED:**

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

**SAMPLES REC'D DAY OF COLLECTION?** Yes / No

IR Gun ID = 64916 Observation = 4.9 °C (Corr. Factor = 0.3) (Final = 4.6) °C

TYPE OF ICE: Real  Synthetic  No Ice  Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: Walk-In

**Compliance Acceptance Criteria:**

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final= _____ °C)	2 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final= _____ °C)
3 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final= _____ °C)	4 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final= _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) VOA Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

**Headspace Documentation (use additional VOC internal COFC for additional bottles)**

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, international clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: <u>Yaver</u>	PRINT NAME: <u>Paul Mills</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>5-19-20</u>	TIME: <u>1405</u>
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Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Report:** 871876  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

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**Folder Comments**

GAC-1-20200519 &MB-INF-20200519

Unfortunately when analyzing these two samples for EPA 537.1, the original extraction and re-extraction both had surrogate failures in the samples and batch QCs rendering the data invalid for compliance. Since there are only two bottles for each sample, we don't have any remaining back up bottles to re-extract a third time. The data will be flagged for surrogate failures.

**Flags Legend:**

S4 - Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.

S7 - Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.

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Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202005190374      <u>GAC-1-20200519</u></b>						
05/28/2020 16:26	Perfluorooctanesulfonic acid (PFOS)		0.0024		ug/L	0.0020
<b>202005190382      <u>LH-INF-20200519</u></b>						
05/22/2020 23:44	Alkalinity in CaCO3 units		200		mg/L	2.0
05/19/2020 20:35	Chloride		110	250	mg/L	2.5
05/19/2020 20:35	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
05/19/2020 20:35	Nitrate as NO3 (calc)		12	45	mg/L	2.2
05/28/2020 17:54	Perfluorobutanesulfonic acid (PFBS)		0.0063		ug/L	0.0020
05/28/2020 17:54	Perfluorohexanesulfonic acid (PFHxS)		0.0065		ug/L	0.0020
05/28/2020 17:54	Perfluorohexanoic acid (PFHxA)		0.0029		ug/L	0.0020
05/28/2020 17:54	Perfluorononanoic acid (PFNA)		0.0031		ug/L	0.0020
05/28/2020 17:54	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
05/28/2020 17:54	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
05/19/2020 20:35	Sulfate		180	250	mg/L	2.5
05/19/2020 20:35	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
05/28/2020 13:13	Total Organic Carbon		0.63		mg/L	0.30
<b>202005190391      <u>MB-INF-20200519</u></b>						
05/22/2020 23:52	Alkalinity in CaCO3 units		170		mg/L	2.0
05/19/2020 20:22	Chloride		56	250	mg/L	2.5
05/19/2020 20:22	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
05/19/2020 20:22	Nitrate as NO3 (calc)		11	45	mg/L	2.2
05/28/2020 19:21	Perfluorobutanesulfonic acid (PFBS)		0.0036		ug/L	0.0020
05/28/2020 19:21	Perfluorohexanesulfonic acid (PFHxS)		0.0025		ug/L	0.0020
05/28/2020 19:21	Perfluorooctanesulfonic acid (PFOS)		0.013		ug/L	0.0020
05/28/2020 19:21	Perfluorooctanoic acid (PFOA)		0.0059		ug/L	0.0020
05/19/2020 20:22	Sulfate		84	250	mg/L	2.5
05/19/2020 20:22	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
05/28/2020 13:31	Total Organic Carbon		0.71		mg/L	0.30



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Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20200519 (202005190374)</b>					<b>Sampled on 05/19/2020 1052</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND (S4)	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND (S4)	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0024	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	13C2-PFDA	131 (S4)	%		1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	13C2-PFHxA	133 (S4)	%		1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	125	%		1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	128	%		1

<b>GAC-2-20200519 (202005190375)</b>					<b>Sampled on 05/19/2020 1055</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	13C2-PFDA	124	%		1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	13C2-PFHxA	124	%		1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	118	%		1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	118	%		1

**GAC-3-20200519 (202005190376)**

**Sampled on 05/19/2020 1058**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	13C2-PFDA	114	%		1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	13C2-PFHxA	116	%		1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	109	%		1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**GAC-4-20200519 (202005190377)**

**Sampled on 05/19/2020 1101**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	13C2-PFDA	117	%		1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	13C2-PFHxA	120	%		1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	112	%		1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	116	%		1

**IX-1-20200519 (202005190378)**

Static ID: 537.1

Sampled on 05/19/2020 1104

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	13C2-PFDA	114	%		1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	13C2-PFHxA	122	%		1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	115	%		1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	113	%		1

**IX-2-20200519 (202005190379)**

**Sampled on 05/19/2020 1107**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	13C2-PFDA	115	%		1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	13C2-PFHxA	118	%		1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	111	%		1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	112	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	112	%		1
<b>IX-3-20200519 (202005190380)</b>						<b>Sampled on 05/19/2020 1110</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	13C2-PFDA	120	%		1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	13C2-PFHxA	122	%		1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	114	%		1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	116	%		1

**IX-4-20200519 (202005190381)**

**Sampled on 05/19/2020 1113**

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	13C2-PFDA	112	%		1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	13C2-PFHxA	120	%		1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	116	%		1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	113	%		1

**LH-INF-20200519 (202005190382)**

**Sampled on 05/19/2020 1116**

**SM 5310C - Total Organic Carbon**

05/28/20 13:13	1251525	(SM 5310C)	Total Organic Carbon	0.63	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

05/19/20 20:35	1249655	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
05/19/20 20:35	1249655	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
05/19/20 20:35	1249655	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
05/19/20 20:35	1249655	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

05/19/20 20:35	1249657	(EPA 300.0)	Chloride	110	mg/L	2.5	5
05/19/20 20:35	1249657	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0063	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0065	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0029	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0031	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	13C2-PFDA	115	%		1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	13C2-PFHxA	111	%		1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	114	%		1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	102	%		1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	121	%		1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	113	%		1

**SM 2320B - Alkalinity in CaCO3 units**

05/22/20 23:44	1250460	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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**GAC-5-20200519 (202005190383)**

**Sampled on 05/19/2020 1252**

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	13C2-PFDA	114	%		1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	13C2-PFHxA	115	%		1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	109	%		1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	111	%		1

**GAC-6-20200519 (202005190384)**

Sampled on 05/19/2020 1255

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	13C2-PFDA	110	%		1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	13C2-PFHxA	116	%		1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	109	%		1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	110	%		1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	110	%		1

**GAC-7-20200519 (202005190385)**

Sampled on 05/19/2020 1258

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	13C2-PFDA	119	%		1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	13C2-PFHxA	118	%		1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	114	%		1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	112	%		1

**GAC-8-20200519 (202005190386)**

Sampled on 05/19/2020 1301

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	13C2-PFDA	111	%		1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	13C2-PFHxA	116	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	106	%		1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	114	%		1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	106	%		1

**IX-5-20200519 (202005190387)**

**Sampled on 05/19/2020 1304**

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	13C2-PFDA	117	%		1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	13C2-PFHxA	120	%		1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	113	%		1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	117	%		1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	109	%		1

**IX-6-20200519 (202005190388)**

**Sampled on 05/19/2020 1307**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 537.1 - EPA Method 537.1</b>									
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	13C2-PFDA	122	%		1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	13C2-PFHxA	124	%		1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	114	%		1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	115	%		1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	113	%		1

**IX-7-20200519 (202005190389)**

Sampled on 05/19/2020 1310

<b>EPA 537.1 - EPA Method 537.1</b>									
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	13C2-PFDA	114	%		1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	13C2-PFHxA	118	%		1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	109	%		1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	119	%		1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	107	%		1

**IX-8-20200519 (202005190390)**

Sampled on 05/19/2020 1313

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	13C2-PFDA	115	%		1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	13C2-PFHxA	121	%		1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	111	%		1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	116	%		1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**MB-INF-20200519 (202005190391)**

Sampled on 05/19/2020 1316

**SM 5310C - Total Organic Carbon**

05/28/20 13:31	1251525	(SM 5310C)	Total Organic Carbon	0.71	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

05/19/20 20:22	1249655	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
05/19/20 20:22	1249655	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
05/19/20 20:22	1249655	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
05/19/20 20:22	1249655	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

05/19/20 20:22	1249657	(EPA 300.0)	Chloride	56	mg/L	2.5	5
05/19/20 20:22	1249657	(EPA 300.0)	Sulfate	84	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND (S7)	ug/L	0.0050	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND (S7)	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0036	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND (S7)	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0025	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND (S7)	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.013	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0059	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	13C2-PFDA	47 (S7)	%		1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	13C2-PFHxA	50 (S7)	%		1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	46 (S7)	%		1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	42 (S7)	%		1

**SM 2320B - Alkalinity in CaCO3 units**

05/22/20 23:52	1250460	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
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**FB-20200519 (202005190392)**

Sampled on 05/19/2020 1320

**EPA 537.1 - EPA Method 537.1**

05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

**Report:** 871876  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	13C2-PFDA	112	%		1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	13C2-PFHxA	123	%		1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	13C3-HFPO-DA	107	%		1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	d3-NMeFOSAA	93	%		1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	d5-NEtFOSAA	118	%		1

Rounding on totals after summation.  
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**Report:** 871876  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

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**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1249655**

202005190382 LH-INF-20200519  
 202005190391 MB-INF-20200519

**Analysis Date: 05/19/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1249657**

202005190382 LH-INF-20200519  
 202005190391 MB-INF-20200519

**Analysis Date: 05/19/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Alkalinity in CaCO3 units**

**Analytical Batch: 1250460**

202005190382 LH-INF-20200519  
 202005190391 MB-INF-20200519

**Analysis Date: 05/22/2020**

Analyzed by: ZB2Z  
 Analyzed by: ZB2Z

**Total Organic Carbon**

**Analytical Batch: 1251525**

202005190382 LH-INF-20200519  
 202005190391 MB-INF-20200519

**Analysis Date: 05/28/2020**

Analyzed by: ZS6I  
 Analyzed by: ZS6I

**EPA Method 537.1**

**Prep Batch: 1251017 Analytical Batch: 1251781**

202005190374 GAC-1-20200519  
 202005190375 GAC-2-20200519  
 202005190376 GAC-3-20200519  
 202005190377 GAC-4-20200519  
 202005190378 IX-1-20200519  
 202005190379 IX-2-20200519  
 202005190380 IX-3-20200519  
 202005190381 IX-4-20200519  
 202005190382 LH-INF-20200519  
 202005190383 GAC-5-20200519  
 202005190384 GAC-6-20200519  
 202005190385 GAC-7-20200519  
 202005190386 GAC-8-20200519  
 202005190387 IX-5-20200519  
 202005190388 IX-6-20200519  
 202005190389 IX-7-20200519  
 202005190390 IX-8-20200519  
 202005190391 MB-INF-20200519

**Analysis Date: 05/28/2020**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
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 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM

**EPA Method 537.1**

**Prep Batch: 1251841 Analytical Batch: 1252352**

202005190392 FB-20200519

**Analysis Date: 06/01/2020**

Analyzed by: SZZ

Tel: (626) 386-1100  
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Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1249655</b>					<b>Analysis Date: 05/19/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.58	mg/L	103	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	102	(90-110)	20	1.6
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0493	mg/L	99	(50-150)		
MS_202005190099	Nitrate as Nitrogen by IC	ND	6.5	6.92	mg/L	109	(80-120)		
MS_202005190113	Nitrate as Nitrogen by IC	0.35	6.5	7.12	mg/L	108	(80-120)		
MSD_202005190099	Nitrate as Nitrogen by IC	ND	6.5	6.95	mg/L	110	(80-120)	20	0.49
MSD_202005190113	Nitrate as Nitrogen by IC	0.35	6.5	7.22	mg/L	110	(80-120)	20	1.4
LCS1	Nitrite Nitrogen by IC		1	1.05	mg/L	105	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.05	mg/L	105	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0514	mg/L	103	(50-150)		
MS_202005190099	Nitrite Nitrogen by IC	ND	2.5	2.82	mg/L	113	(80-120)		
MS_202005190113	Nitrite Nitrogen by IC	ND	2.5	2.66	mg/L	106	(80-120)		
MSD_202005190099	Nitrite Nitrogen by IC	ND	2.5	2.83	mg/L	113	(80-120)	20	0.18
MSD_202005190113	Nitrite Nitrogen by IC	ND	2.5	2.70	mg/L	108	(80-120)	20	1.4
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1249657</b>					<b>Analysis Date: 05/19/2020</b>				
LCS1	Chloride		25	26.7	mg/L	107	(90-110)		
LCS2	Chloride		25	26.4	mg/L	106	(90-110)	20	1.1
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.465	mg/L	93	(50-150)		
MS_202005190099	Chloride	27	65	102	mg/L	119	(80-120)		
MS_202005190113	Chloride	180	65	239	mg/L	101	(80-120)		
MSD_202005190099	Chloride	27	65	102	mg/L	120	(80-120)	20	1
MSD_202005190113	Chloride	180	65	241	mg/L	104	(80-120)	20	0.75
LCS1	Sulfate		50	53.0	mg/L	106	(90-110)		
LCS2	Sulfate		50	52.4	mg/L	105	(90-110)	20	1.1
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	1.04	mg/L	104	(50-150)		
MRLW	Sulfate		0.25	0.247	mg/L	99	(50-150)		
MS_202005190099	Sulfate	18	125	161	mg/L	114	(80-120)		
MS_202005190113	Sulfate	25	125	166	mg/L	113	(80-120)		
MSD_202005190099	Sulfate	18	125	161	mg/L	115	(80-120)	20	0.23

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202005190113	Sulfate	25	125	168	mg/L	115	(80-120)	20	1.1

**Alkalinity in CaCO3 units by SM 2320B**

Analytical Batch: 1250460

Analysis Date: 05/22/2020

LCS1	Alkalinity in CaCO3 units		100	97.8	mg/L	98	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.6	mg/L	99	(90-110)	20	0.82
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.99	mg/L	100	(50-150)		
MS_202004140066	Alkalinity in CaCO3 units	230	100	277	mg/L	<b>46</b>	(80-120)		
MS_202005080081	Alkalinity in CaCO3 units	ND	100	102	mg/L	102	(80-120)		
MSD_202004140066	Alkalinity in CaCO3 units	230	100	277	mg/L	<b>46</b>	(80-120)	20	0.069
MSD_202005080081	Alkalinity in CaCO3 units	ND	100	102	mg/L	102	(80-120)	20	0.23

**Total Organic Carbon by SM 5310C**

Analytical Batch: 1251525

Analysis Date: 05/28/2020

LCS1	Total Organic Carbon		5	4.84	mg/L	97	(90-110)		
LCS2	Total Organic Carbon		5	4.96	mg/L	99	(90-110)	20	2.5
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.248	mg/L	124	(50-150)		
MS_202005150246	Total Organic Carbon	6.8	8	15.6	mg/L	110	(80-120)		
MS2_202005130144	Total Organic Carbon	3.8	2	6.05	mg/L	110	(80-120)		
MSD_202005150246	Total Organic Carbon	6.8	8	15.5	mg/L	109	(80-120)	20	0.44
MSD2_202005130144	Total Organic Carbon	3.8	2	6.05	mg/L	110	(80-120)	20	0.033

**EPA Method 537.1 by EPA 537.1**

Prep Batch: 1251017 Analytical Batch: 1251781

Analysis Date: 05/28/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0241	ug/L	103	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0258	ug/L	110	(70-130)	30	6.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00206	ug/L	109	(50-150)		
MS_202005180036	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00208	ug/L	111	(50-150)		
MSD_202005180036	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00212	ug/L	113	(50-150)	50	1.7
LCS1	13C2-PFDA (S)		100	110	%	110	(70-130)		
LCS2	13C2-PFDA (S)		100	115	%	115	(70-130)		
MBLK	13C2-PFDA (S)			112	%	112	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	118	%	118	(70-130)		
MS_202005180036	13C2-PFDA (S)		100	105	%	105	(70-130)		
MSD_202005180036	13C2-PFDA (S)		100	115	%	115	(70-130)		
LCS1	13C2-PFHxA (S)		100	118	%	118	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	13C2-PFHxA (S)		100	121	%	121	(70-130)		
MBLK	13C2-PFHxA (S)			116	%	116	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	122	%	122	(70-130)		
MS_202005180036	13C2-PFHxA (S)		100	108	%	108	(70-130)		
MSD_202005180036	13C2-PFHxA (S)		100	122	%	122	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			104	%	104	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MS_202005180036	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MSD_202005180036	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	112	%	112	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	116	%	116	(70-130)		
MBLK	13C3-HFPO-DA (S)			108	%	108	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	116	%	116	(70-130)		
MS_202005180036	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MSD_202005180036	13C3-HFPO-DA (S)		100	112	%	112	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	97.5	%	98	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MS_202005180036	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MSD_202005180036	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0245	ug/L	104	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0254	ug/L	108	(70-130)	30	3.6
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00218	ug/L	116	(50-150)		
MS_202005180036	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00214	ug/L	113	(50-150)		
MSD_202005180036	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00219	ug/L	116	(50-150)	50	2.1
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0234	ug/L	100	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0249	ug/L	107	(70-130)	30	6.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00209	ug/L	112	(50-150)		
MS_202005180036	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00203	ug/L	109	(50-150)		
MSD_202005180036	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00204	ug/L	109	(50-150)	50	0.59
LCS1	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MBLK	d3-NMeFOSAA (I)			106	%	106	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
MS_202005180036	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MSD_202005180036	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
MBLK	d5-NEtFOSAA (S)			105	%	105	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
MS_202005180036	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MSD_202005180036	d5-NEtFOSAA (S)		100	108	%	108	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0252	ug/L	101	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0254	ug/L	102	(70-130)	30	1.2
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00224	ug/L	112	(50-150)		
MS_202005180036	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00204	ug/L	102	(50-150)		
MSD_202005180036	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00218	ug/L	109	(50-150)	50	6.9
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0240	ug/L	96	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0256	ug/L	103	(70-130)	30	6.5
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00212	ug/L	106	(50-150)		
MS_202005180036	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00221	ug/L	111	(50-150)		
MSD_202005180036	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00217	ug/L	109	(50-150)	50	1.9
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0239	ug/L	96	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0256	ug/L	102	(70-130)	30	6.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00224	ug/L	112	(50-150)		
MS_202005180036	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00212	ug/L	106	(50-150)		
MSD_202005180036	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00212	ug/L	106	(50-150)	50	0.030
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0238	ug/L	108	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0245	ug/L	111	(70-130)	30	2.9
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00201	ug/L	114	(50-150)		
MS_202005180036	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00210	ug/L	118	(50-150)		
MSD_202005180036	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00204	ug/L	116	(50-150)	50	2.8
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0275	ug/L	110	(70-130)	30	1.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00227	ug/L	114	(50-150)		
MS_202005180036	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00220	ug/L	110	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202005180036	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00224	ug/L	112	(50-150)	50	1.6
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0265	ug/L	106	(70-130)	30	0.38
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00230	ug/L	115	(50-150)		
MS_202005180036	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202005180036	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00224	ug/L	112	(50-150)	50	3.7
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0285	ug/L	114	(70-130)	30	2.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00248	ug/L	124	(50-150)		
MS_202005180036	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00234	ug/L	117	(50-150)		
MSD_202005180036	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00246	ug/L	123	(50-150)	50	5.1
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0244	ug/L	107	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0257	ug/L	113	(70-130)	30	5.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00217	ug/L	119	(50-150)		
MS_202005180036	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00219	ug/L	120	(50-150)		
MSD_202005180036	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00209	ug/L	114	(50-150)	50	4.6
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0275	ug/L	110	(70-130)	30	1.1
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00242	ug/L	121	(50-150)		
MS_202005180036	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00230	ug/L	115	(50-150)		
MSD_202005180036	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00245	ug/L	122	(50-150)	50	6.3
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0259	ug/L	104	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0274	ug/L	110	(70-130)	30	5.6
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00239	ug/L	119	(50-150)		
MS_202005180036	Perfluorononanoic acid (PFNA)	ND	0.002	0.00221	ug/L	111	(50-150)		
MSD_202005180036	Perfluorononanoic acid (PFNA)	ND	0.002	0.00229	ug/L	114	(50-150)	50	3.5
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0237	ug/L	102	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0249	ug/L	108	(70-130)	30	4.9
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00211	ug/L	114	(50-150)		
MS_202005180036	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00211	ug/L	114	(50-150)		
MSD_202005180036	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00200	ug/L	108	(50-150)	50	5.2
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0261	ug/L	105	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 871876  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0269	ug/L	108	(70-130)	30	3.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00248	ug/L	124	(50-150)		
MS_202005180036	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00232	ug/L	116	(50-150)		
MSD_202005180036	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00246	ug/L	123	(50-150)	50	5.8
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0296	ug/L	118	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0291	ug/L	117	(70-130)	30	1.7
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00264	ug/L	132	(50-150)		
MS_202005180036	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00256	ug/L	128	(50-150)		
MSD_202005180036	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00259	ug/L	130	(50-150)	50	1.1
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0277	ug/L	111	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0280	ug/L	112	(70-130)	30	1.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00236	ug/L	118	(50-150)		
MS_202005180036	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00222	ug/L	111	(50-150)		
MSD_202005180036	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00231	ug/L	116	(50-150)	50	3.8
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0256	ug/L	102	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0258	ug/L	103	(70-130)	30	1.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202005180036	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202005180036	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00215	ug/L	108	(50-150)	50	0.68

EPA Method 537.1 by EPA 537.1

Prep Batch: 1251841 Analytical Batch: 1252352

Analysis Date: 06/01/2020

DUP_202005280429	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0219	ug/L	93	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0223	ug/L	95	(70-130)	30	1.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00170	ug/L	91	(50-150)		
MS2_202005280146	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0436	ug/L	93	(70-130)		
DUP_202005280429	13C2-PFDA (S)			110	%	110	(70-130)		
LCS1	13C2-PFDA (S)		100	117	%	117	(70-130)		
LCS2	13C2-PFDA (S)		100	113	%	113	(70-130)		
MBLK	13C2-PFDA (S)			112	%	112	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	110	%	111	(70-130)		
MS2_202005280146	13C2-PFDA (S)		100	115	%	115	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202005280429	13C2-PFHxA (S)			113	%	113	(70-130)		
LCS1	13C2-PFHxA (S)		100	124	%	124	(70-130)		
LCS2	13C2-PFHxA (S)		100	122	%	122	(70-130)		
MBLK	13C2-PFHxA (S)			116	%	116	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	116	%	116	(70-130)		
MS2_202005280146	13C2-PFHxA (S)		100	121	%	121	(70-130)		
DUP_202005280429	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			108	%	109	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
MS2_202005280146	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
DUP_202005280429	13C3-HFPO-DA (S)			107	%	107	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	113	%	113	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	109	%	109	(70-130)		
MBLK	13C3-HFPO-DA (S)			105	%	105	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MS2_202005280146	13C3-HFPO-DA (S)		100	110	%	110	(70-130)		
DUP_202005280429	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	104	%	105	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			107	%	107	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS2_202005280146	13C4-PFOS- IS#2 (I)		100	99.7	%	100	(50-150)		
DUP_202005280429	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0264	ug/L	112	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0259	ug/L	110	(70-130)	30	1.9
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00194	ug/L	103	(50-150)		
MS2_202005280146	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0469	ug/L	97	(70-130)		
DUP_202005280429	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0232	ug/L	100	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0243	ug/L	104	(70-130)	30	4.6
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00181	ug/L	97	(50-150)		
MS2_202005280146	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0458	ug/L	98	(70-130)		
DUP_202005280429	d3-NMeFOSAA (I)			95.1	%	95	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 871876  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MBLK	d3-NMeFOSAA (I)			109	%	109	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
MS2_202005280146	d3-NMeFOSAA (I)		100	96.9	%	97	(50-150)		
DUP_202005280429	d5-NEtFOSAA (S)			112	%	113	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	110	%	110	(70-130)		
MBLK	d5-NEtFOSAA (S)			117	%	117	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MS2_202005280146	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
DUP_202005280429	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0228	ug/L	91	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0227	ug/L	91	(70-130)	30	0.44
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00170	ug/L	85	(50-150)		
MS2_202005280146	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0454	ug/L	91	(70-130)		
DUP_202005280429	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0247	ug/L	99	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0248	ug/L	99	(70-130)	30	0.40
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS2_202005280146	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0455	ug/L	91	(70-130)		
DUP_202005280429	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0257	ug/L	103	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0257	ug/L	103	(70-130)	30	0.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00225	ug/L	112	(50-150)		
MS2_202005280146	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0479	ug/L	96	(70-130)		
DUP_202005280429	Perfluorobutanesulfonic acid (PFBS)	0.0056		0.00542	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0235	ug/L	106	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0234	ug/L	106	(70-130)	30	0.43
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00189	ug/L	107	(50-150)		
MS2_202005280146	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0455	ug/L	103	(70-130)		
DUP_202005280429	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0256	ug/L	103	(70-130)	30	1.2
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00198	ug/L	99	(50-150)		
MS2_202005280146	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0483	ug/L	97	(70-130)		
DUP_202005280429	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0256	ug/L	102	(70-130)	30	0.78
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00200	ug/L	100	(50-150)		
MS2_202005280146	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0484	ug/L	97	(70-130)		
DUP_202005280429	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0282	ug/L	113	(70-130)	30	0.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00221	ug/L	111	(50-150)		
MS2_202005280146	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0521	ug/L	104	(70-130)		
DUP_202005280429	Perfluorohexanesulfonic acid (PFHxS)	0.0035		0.00359	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0252	ug/L	110	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0253	ug/L	111	(70-130)	30	0.40
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00200	ug/L	109	(50-150)		
MS2_202005280146	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0490	ug/L	107	(70-130)		
DUP_202005280429	Perfluorohexanoic acid (PFHxA)	0.0096		0.00948	ug/L		(0-30)	30	1.4
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0274	ug/L	109	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0268	ug/L	107	(70-130)	30	2.2
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00215	ug/L	107	(50-150)		
MS2_202005280146	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0539	ug/L	108	(70-130)		
DUP_202005280429	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0265	ug/L	106	(70-130)	30	1.1
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00209	ug/L	104	(50-150)		
MS2_202005280146	Perfluorononanoic acid (PFNA)	ND	0.05	0.0500	ug/L	100	(70-130)		
DUP_202005280429	Perfluorooctanesulfonic acid (PFOS)	0.0034		0.00339	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0242	ug/L	105	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0248	ug/L	107	(70-130)	30	2.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00206	ug/L	111	(50-150)		
MS2_202005280146	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0464	ug/L	100	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
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Report: 871876  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202005280429	Perfluorooctanoic acid (PFOA)	0.0071		0.00716	ug/L		(0-30)	30	0.75
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0276	ug/L	110	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0265	ug/L	106	(70-130)	30	4.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00225	ug/L	112	(50-150)		
MS2_202005280146	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0521	ug/L	104	(70-130)		
DUP_202005280429	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0248	ug/L	99	(70-130)	30	0.80
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00185	ug/L	92	(50-150)		
MS2_202005280146	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0467	ug/L	93	(70-130)		
DUP_202005280429	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0242	ug/L	97	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0242	ug/L	97	(70-130)	30	0.41
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00184	ug/L	92	(50-150)		
MS2_202005280146	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0457	ug/L	91	(70-130)		
DUP_202005280429	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0249	ug/L	100	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0244	ug/L	98	(70-130)	30	2.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00194	ug/L	97	(50-150)		
MS2_202005280146	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0482	ug/L	96	(70-130)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 06/02/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 06/02/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 06/02/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:





Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)\*

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required

Approved by

Date of Issue: 06/02/2020

Quant Report - Page 1 of 1

Tel Fax

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)



## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 872940  
Project: 0250000  
Group: WRD Pilot [Set #1]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 872940  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **May 26, 2020 at 1401**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202005260418	GAC-1-20200526	05/26/2020 0912
	Static ID: SET #1 537.1	
	@537.1	
202005260431	GAC-2-20200526	05/26/2020 0915
	@537.1	
202005260432	GAC-3-20200526	05/26/2020 0918
	@537.1	
202005260433	GAC-4-20200526	05/26/2020 0921
	@537.1	
202005260434	IX-1-20200526	05/26/2020 0924
	@537.1	
202005260435	IX-2-20200526	05/26/2020 0927
	@537.1	
202005260436	IX-3-20200526	05/26/2020 0930
	@537.1	
202005260437	IX-4-20200526	05/26/2020 0933
	@537.1	
202005260438	LH-INF-20200526	05/26/2020 0936
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Calcium Total ICAP
	Chloride	Iron Total ICAP
	Magnesium Total ICAP	Oil and Grease by 1664(subbed)
	Perchlorate	Sodium Total ICAP
	Sulfate	Total Hardness as CaCO3 by ICP
	Total Organic Carbon	Uranium by ICPMS as pCi/L
	Uranium ICAP/MS	
202005260439	LH-INF-DUP-20200526	05/26/2020 0937
	@537.1	
202005260440	GAC-5-20200526	05/26/2020 1112

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 872940  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **May 26, 2020 at 1401**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202005260441	GAC-6-20200526	05/26/2020 1115
	@537.1	
202005260442	GAC-7-20200526	05/26/2020 1118
	@537.1	
202005260443	GAC-8-20200526	05/26/2020 1121
	@537.1	
202005260444	IX-5-20200526	05/26/2020 1124
	@537.1	
202005260445	IX-6-20200526	05/26/2020 1127
	@537.1	
202005260446	IX-7-20200526	05/26/2020 1130
	@537.1	
202005260447	IX-8-20200526	05/26/2020 1133
	@537.1	
202005260448	MB-INF-20200526	05/26/2020 1136
	@537.1	
	Alkalinity in CaCO3 units	@ANIONS48
	Chloride	Arsenic Total ICAP/MS
	Magnesium Total ICAP	Hexavalent chromium(Dissolved)
	Perchlorate	Manganese Total ICAP/MS
	Sulfate	Potassium Total ICAP
	Total Organic Carbon	Total Dissolved Solid (TDS)
	Uranium ICAP/MS	Total Suspended Solids (TSS)
		@VOASDWA
		Calcium Total ICAP
		Iron Total ICAP
		Oil and Grease by 1664(subbed)
		Sodium Total ICAP
		Total Hardness as CaCO3 by ICP
		Uranium by ICPMS as pCi/L
202005260460	Field Blank - Hold	05/26/2020 1137
	@537.1 FB	

### Test Description

@537.1 -- EPA Method 537.1

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 872940  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **May 26, 2020 at 1401**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1 FB -- EPA Method 537.1	
	@ANIONS48 -- Nitrate, Nitrite by EPA 300.0	
	@VOASDWA -- Volatile Organics by GCMS	

*072940*

FROM: GSI Environmental Inc.  
 19200 Von Karman Ave, Suite 800  
 Irvine, CA 92612  
 (949) 679-1070

PROJECT NAME: WRD Pilot

PROJECT CONTACT: Miae Jeon

GLOBAL ID:

PROJECT NO.: 5302

LAB CONTACT: Sophia Liang

SAMPLER(S): (PRINT) RDT

TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com

LABORATORY: Eurofins Eaton Analytical

TURNAROUND TIME:  SAME DAY  24 HR  48 HR  STANDARD  
 72 HR  5 DAYS

SPECIAL INSTRUCTIONS:  
 Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com;  
 Provide EDD of sample results

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	RECEIVED STATUS		
		DATE	TIME			Unpreserved	Preserved	Field Filtered
	GAC-1-20200526	5-26	0912	Water	2			
	GAC-2-20200526		0915	Water	2			
	GAC-3-20200526		0918	Water	2			
	GAC-4-20200526		0921	Water	2			
	IX-1-20200526		0924	Water	2			
	IX-2-20200526		0927	Water	2			
	IX-3-20200526		0930	Water	2			
	IX-4-20200526		0933	Water	2			
	LH-INF-20200526		0936	Water	14	X		
	LH-INF-DUP-20200526		0937	Water	2	X		
	GAC-5-20200526		1112	Water	2			
	GAC-6-20200526		1115	Water	2			
	GAC-7-20200526		1118	Water	2			
	GAC-8-20200526		1121	Water	2			

Requested Analytes: Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0), Alkalinity (as CaCO3), (SM 2320B), Uranium, Arsenic, Manganese (EPA 200.8), Perchlorate (EPA 314.0), Hexavalent Chromium (EPA 218.6), Fe, Na, K, Ca, Mg (EPA 200.7), Total Hardness as CaCO3 (SM 2340B), VOCs (EPA 524.2), TOC (SM 5310C), TDS (E160.1/SM 2540C), TSS (SM 2540D), Oil & Grease (EPA 1664)

Received by: (Signature) [Signature] Date: 5-26-20 Time: 1345

Received by: (Signature) [Signature] Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_



FROM: GSI Environmental Inc.  
19200 Von Karman Ave, Suite 800  
Irvine, CA 92612  
(949) 679-1070

PROJECT NAME: WRD Pilot

PROJECT NO.: 5302

LAB CONTACT: Miae Jeon

GLOBAL ID:

SAMPLER(S): (PRINT) **RDT**

LAB CONTACT: Sophia Liang

E-MAIL: mjeon@gsi-net.com

PROJECT NO.: 5302

TELEPHONE: (949) 679-1070

LABORATORY: Eurofins Eaton Analytical

TURNAROUND TIME:  
 SAME DAY  
 24 HR  
 48 HR  
 72 HR  
 5 DAYS  
 STANDARD

SPECIAL INSTRUCTIONS:  
 Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com,  
 & rdtorres@gsi-net.com;  
 Provide EDD of sample results

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION			Field Filtered	REQUESTED ANALYSES																																	
		DATE	TIME			Unpreserved	Preserved	PFAS - full list (EPA 537.1)		Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)																						
	IX-5-20200526	5-26	1124	Water					X																																		
	IX-6-20200526	↓	1127	Water						X																																	
	IX-7-20200526		1130	Water						X																																	
	IX-8-20200526		1133	Water						X																																	
	MB-INF-20200526		1136	Water						X																																	
	MB-INF-DUP			Water						X																																	
	FB-20200526	5-26	1137	Water																																							

Relinquished by: (Signature) *[Signature]* Date: **5-26-20** Time: **1345**

Received by: (Signature) *[Signature]* Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: (Signature) *[Signature]* Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: (Signature) *[Signature]* Date: \_\_\_\_\_ Time: \_\_\_\_\_

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 672940

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 618A (Observation = 12.2 °C) (Corr.Factor = 0.2 °C) (Final = 12.0 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= _____ °C) (Corr.Factor= _____ °C) (Final = _____ °C)	2 = (Observation= _____ °C) (Corr.Factor= _____ °C) (Final = _____ °C)
3 = (Observation= _____ °C) (Corr.Factor= _____ °C) (Final = _____ °C)	4 = (Observation= _____ °C) (Corr.Factor= _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) VOA Headspace:  No Samples with Headspace:  Samples with Headspace (see below):   
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	Samp ID	Bottle #	None/<6 mm	None/<6 mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: <u>[Signature]</u>	PRINT NAME: <u>Victor Plasencia</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>5-26-20</u>	TIME: <u>1401</u>
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Eaton Analytical

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100  
 Monrovia, California 91016-3629  
 (626) 386-1100 FAX (866) 988-3757

Created Date & Time: 4/30/2020 1:04:52PM

**Note: Sampler Please return this paper with your samples**

Client ID: WRD



Project Code: 0250000 Bottle Orders

Group Name: WRD Pilot [Set #1]

PO#/JOB#:

Description: WRD Pilot Set #1

Shipping Method: Pickup by client



Kit #: 262924

Created By: Sophia F Liang - [SFL]

Deliver By: 05/11/2020

STG: Bottle Orders

Ice Type: G

Pre Registered

Ship Sample Kits to  
 GSI Environmental Inc.

Attn: Robert Torres  
 Phone: 951-616-8406

Send Report to  
 Water Replenishment District  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Attn: Joseph Liles  
 Phone: 562-275-4226

Billing Address  
 Water Replenishment District

Attn: Eurofins Calscience  
 Water Replenishment District  
 4040 Paramount Blvd  
 Lakewood, CA 90712

Attn: Brian Partington  
 Phone: 562-275-4249  
 Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [ preservative information ]	Total	UN DOT #
2	Total Organic Carbon	2	UN1830
2	Hexavalent Chromium (Dissolved)	2	
2	@ANIONS48, Chloride, Sulfate	2	
2	Perchlorate	2	
2	Oil and Grease by 1664(subbed)	4	
2	Alkalinity in CaCO3 units	2	
4	@537.1	8	
2	@VOASDWA	6	UN1789
2	Arsenic Total ICAP/MS, Calcium Total ICAP, Iron Total ICAP, Magnesium Total ICAP, Manganese Total ICAP/MS, Potassium Total ICAP, Sodium Total ICAP, Uranium by ICP/MS as pCVL, Uranium ICAP/MS	2	UN2031
2	Total Dissolved Solid (TDS), Total Suspended Solids (TSS)	2	

**Sum Bottles: 32**

**Sum Tests: 22**

Comments

**Kit Order for Water Replenishment District**

Eaton Analytical  
Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
(626) 386-1100 FAX (866) 988-3757

Created Date & Time: 4/30/2020 1:04:52PM

**Note: Sampler Please return this paper with your samples**

Client ID: WRD



Project Code: 0250000 Bottle Orders

Group Name: WRD Pilot [Set #1]

PO#/JOB#:

Description: WRD Pilot Set #1

Shipping Method: Pickup by client



Kit #: 262924

Created By: Sophia F Liang - [SFL]

Deliver By: 05/11/2020

STG: Bottle Orders

Ice Type: G

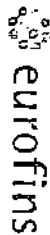
Pre Registered

<b>Send Report to</b> Water Replenishment District 4040 Paramount Blvd. Lakewood, CA 90712	<b>Billing Address</b> Water Replenishment District
Attn: Joseph Lilies Phone: 562-275-4226	Attn: Eurofins Calscience Water Replenishment District 4040 Paramount Blvd Lakewood, CA 90712
	Attn: Brian Parlington Phone: 562-275-4249 Fax: 562-921-6101

<b>Ship Sample Kits to</b> GSI Environmental Inc.	<b>Send Report to</b> Water Replenishment District 4040 Paramount Blvd. Lakewood, CA 90712
Attn: Robert Torres Phone: 951-616-8406	Attn: Joseph Lilies Phone: 562-275-4226

# of Sample Tests	Bottle Qty - Type [ preservative information ]	Total	UN DOT #
<b>SHIPPING:</b> - CLIENT P/U TUESDAY, MAY 12TH @ 1PM - PACKAGE IN 2 LARGE COOLERS <b>GSI SAMPLER:</b> - PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COC ALONG WITH THE SAMPLES. - NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP. <b>ASM:</b> -Please also send invoices to Miae Jeon (mjeon@gsi-net.com) -Report copies to be sent to Miae Jeon, mjeon@gsi-net.com, Pat Galvin, pgalvin@gsi-net.com, and rdtorres@gsi-net.com.			

Code      Status      Date Shipped      Via      Tracking #      # of Coolers      Prepared By



Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.  
SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 618A (Observation = 12.2 °C) (Corr.Factor = 0.2 °C) (Final = 12.0 °C)

TYPE OF ICE: Real  Synthetic  No Ice  CONDITION OF ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	2 = (Observation _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)
3 = (Observation _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	4 = (Observation _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

- 5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_
- 6) Chlorine check. Manufacturer: Sansate. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_
- 7) VOA Headspace: \_\_\_\_\_ No Samples with Headspace:  Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532.CMS, 556, 558, Anatoxin, LCM S methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm

Samp ID	Bottle #	None/<6	>6mm

Samp ID	Bottle #	None/<6	>6mm

Samp ID	Bottle #	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: \_\_\_\_\_ SIGNATURE

PRINT NAME

COMPANY/TITLE

DATE

TIME

Victor Proxmire

Eurofins Eaton Analytical

5.21.20

1401

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 872940  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---

**Folder Comments**

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove, CAELAP 2944 exp 9-30-2020

**Flags Legend:**

BA - Target analyte detected in method blank at or above the laboratory minimum reporting limits (MRL), but analyte not present in the sample.

LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.

VC - CCV is high biased, ND data are reportable as per TNI V1M4 1.7.2.e).i.

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202005260438</b>	<b><u>LH-INF-20200526</u></b>			
05/27/2020 19:59	Alkalinity in CaCO3 units		200		mg/L	2.0
05/27/2020 18:17	Arsenic Total ICAP/MS		3.3	10	ug/L	1.0
05/28/2020 12:36	Calcium Total ICAP		110		mg/L	1.0
05/26/2020 17:41	Chloride		110	250	mg/L	2.5
06/04/2020 15:56	Chloroform (Trichloromethane)		0.55		ug/L	0.50
06/02/2020 12:49	Hexavalent chromium(Dissolved)		0.70		ug/L	0.020
05/28/2020 12:36	Magnesium Total ICAP		21		mg/L	0.10
05/26/2020 17:41	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
05/26/2020 17:41	Nitrate as NO3 (calc)		12	45	mg/L	2.2
05/29/2020 09:57	Perfluorobutanesulfonic acid (PFBS)		0.0059		ug/L	0.0020
05/29/2020 09:57	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
05/29/2020 09:57	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
05/29/2020 09:57	Perfluorononanoic acid (PFNA)		0.0033		ug/L	0.0020
05/29/2020 09:57	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
05/29/2020 09:57	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
05/28/2020 12:36	Potassium Total ICAP		4.6		mg/L	1.0
05/28/2020 12:36	Sodium Total ICAP		67		mg/L	1.0
05/26/2020 17:41	Sulfate		170	250	mg/L	2.5
05/28/2020 21:58	Total Dissolved Solids (TDS)		640	500	mg/L	10
05/28/2020 14:28	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
05/26/2020 17:41	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
06/02/2020 06:43	Total Organic Carbon		0.60		mg/L	0.30
06/04/2020 15:56	Total THM		0.55	80	ug/L	0.50
05/27/2020 18:27	Uranium by ICPMS as pCi/L		3.6		pCi/L	0.70
05/27/2020 18:17	Uranium ICAP/MS		5.4	30	ug/L	1.0
		<b>202005260439</b>	<b><u>LH-INF-DUP-20200526</u></b>			
05/29/2020 10:18	Perfluorobutanesulfonic acid (PFBS)		0.0056		ug/L	0.0020
05/29/2020 10:18	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
05/29/2020 10:18	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
05/29/2020 10:18	Perfluorononanoic acid (PFNA)		0.0033		ug/L	0.0020
05/29/2020 10:18	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
05/29/2020 10:18	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		<b>202005260448</b>	<b><u>MB-INF-20200526</u></b>			
05/27/2020 19:50	Alkalinity in CaCO3 units		170		mg/L	2.0
05/27/2020 18:19	Arsenic Total ICAP/MS		1.6	10	ug/L	1.0

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
05/28/2020 12:37	Calcium Total ICAP		63		mg/L	1.0
05/26/2020 18:19	Chloride		52	250	mg/L	2.5
06/02/2020 12:20	Hexavalent chromium(Dissolved)		0.40		ug/L	0.020
05/28/2020 12:37	Magnesium Total ICAP		12		mg/L	0.10
05/26/2020 18:19	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
05/26/2020 18:19	Nitrate as NO3 (calc)		10	45	mg/L	2.2
05/29/2020 11:58	Perfluorobutanesulfonic acid (PFBS)		0.0097		ug/L	0.0020
05/29/2020 11:58	Perfluoroheptanoic acid (PFHpA)		0.0034		ug/L	0.0020
05/29/2020 11:58	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
05/29/2020 11:58	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
05/29/2020 11:58	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
05/29/2020 11:58	Perfluorooctanesulfonic acid (PFOS)		0.034		ug/L	0.0020
05/29/2020 11:58	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
05/28/2020 12:37	Potassium Total ICAP		3.9		mg/L	1.0
05/28/2020 12:37	Sodium Total ICAP		52		mg/L	1.0
05/26/2020 18:19	Sulfate		78	250	mg/L	2.5
05/28/2020 21:59	Total Dissolved Solids (TDS)		370	500	mg/L	10
05/28/2020 14:28	Total Hardness as CaCO3 by ICP (calc)		210		mg/L	3.0
05/26/2020 18:19	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
06/01/2020 21:11	Total Organic Carbon		0.77		mg/L	0.30
05/27/2020 18:27	Uranium by ICPMS as pCi/L		1.4		pCi/L	0.70
05/27/2020 18:19	Uranium ICAP/MS		2.2	30	ug/L	1.0



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 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20200526 (202005260418)</b>					<b>Sampled on 05/26/2020 0912</b>				
Static ID: SET #1 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	13C2-PFDA	115	%		1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	13C2-PFHxA	114	%		1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	111	%		1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	113	%		1

<b>GAC-2-20200526 (202005260431)</b>					<b>Sampled on 05/26/2020 0915</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	13C2-PFDA	114	%		1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	13C2-PFHxA	113	%		1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	110	%		1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**GAC-3-20200526 (202005260432)**

Sampled on 05/26/2020 0918

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	13C2-PFDA	115	%		1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	13C2-PFHxA	113	%		1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	111	%		1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	110	%		1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	118	%		1

**GAC-4-20200526 (202005260433)**

Sampled on 05/26/2020 0921

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	13C2-PFDA	112	%		1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	13C2-PFHxA	114	%		1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	109	%		1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	110	%		1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	112	%		1

**IX-1-20200526 (202005260434)**

**Sampled on 05/26/2020 0924**

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	13C2-PFDA	111	%		1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	13C2-PFHxA	112	%		1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	112	%		1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	110	%		1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	116	%		1

**IX-2-20200526 (202005260435)**

**Sampled on 05/26/2020 0927**

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	13C2-PFDA	112	%		1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	13C2-PFHxA	112	%		1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	107	%		1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	110	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	109	%		1

**IX-3-20200526 (202005260436)**

**Sampled on 05/26/2020 0930**

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	13C2-PFDA	109	%		1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	13C2-PFHxA	106	%		1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	101	%		1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	109	%		1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**IX-4-20200526 (202005260437)**

**Sampled on 05/26/2020 0933**

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	13C2-PFDA	109	%		1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	13C2-PFHxA	110	%		1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	104	%		1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	107	%		1

**LH-INF-20200526 (202005260438)**

**Sampled on 05/26/2020 0936**

**EPA 200.8 - ICPMS Metals**

05/27/20	05/27/20 18:17	1251084	1251287	(EPA 200.8)	Arsenic Total ICAP/MS	3.3	ug/L	1.0	1
05/27/20	05/27/20 18:17	1251084	1251287	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
05/27/20	05/27/20 18:17	1251084	1251287	(EPA 200.8)	Uranium ICAP/MS	5.4	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

05/27/20	05/28/20 12:36	1251084	1251430	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
05/27/20	05/28/20 12:36	1251084	1251430	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
05/27/20	05/28/20 12:36	1251084	1251430	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
05/27/20	05/28/20 12:36	1251084	1251430	(EPA 200.7)	Potassium Total ICAP	4.6	mg/L	1.0	1
05/27/20	05/28/20 12:36	1251084	1251430	(EPA 200.7)	Sodium Total ICAP	67	mg/L	1.0	1

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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>SM 5310C - Total Organic Carbon</b>									
	06/02/20 06:43		1252402	(SM 5310C)	Total Organic Carbon	0.60	mg/L	0.30	1
<b>EPA 200.8 - Uranium by ICPMS as pCi/L</b>									
	05/27/20 18:27			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.6 (c)	pCi/L	0.70	1
<b>SM 2340B - Total Hardness as CaCO3 by ICP</b>									
	05/28/20 14:28			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
<b>EPA 218.6 - Hexavalent chromium(Dissolved)</b>									
	06/02/20 12:49		1252533	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.70	ug/L	0.020	1
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>									
	05/26/20 17:41		1250939	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
	05/26/20 17:41		1250939	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
	05/26/20 17:41		1250939	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	05/26/20 17:41		1250939	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	05/26/20 17:41		1251012	(EPA 300.0)	Chloride	110	mg/L	2.5	5
	05/26/20 17:41		1251012	(EPA 300.0)	Sulfate	170	mg/L	2.5	5
<b>EPA 314.0 - Perchlorate</b>									
	05/28/20 18:45	(1)	1251176	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0059	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0033	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	13C2-PFDA	113	%		1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	13C2-PFHxA	110	%		1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	101	%		1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	117	%		1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	106	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	05/28/20 09:49			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.96	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (LM)	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Bromoform	ND (VC)	ug/L	0.50	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Chlorodibromomethane	ND (VC)	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Chloroform (Trichloromethane)	0.55	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Naphthalene	ND (BA,LM)	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1

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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Total THM	0.55	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,2-Dichloroethane-d4	106	%		1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	4-Bromofluorobenzene	91	%		1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Toluene-d8	97	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	05/27/20 19:59		1251220	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
05/28/20	05/28/20 21:58	1251658	1251659	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	640	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	05/31/20 14:23		1251944	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<b><u>LH-INF-DUP-20200526 (202005260439)</u></b>					<b>Sampled on 05/26/2020 0937</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0056	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0033	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1

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 Project: 0250000  
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Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	13C2-PFDA	113	%		1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	13C2-PFHxA	109	%		1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	101	%		1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	118	%		1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	110	%		1

**GAC-5-20200526 (202005260440)**

Sampled on 05/26/2020 1112

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	13C2-PFDA	112	%		1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	13C2-PFHxA	112	%		1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1

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Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	106	%		1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	112	%		1

**GAC-6-20200526 (202005260441)**

**Sampled on 05/26/2020 1115**

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	13C2-PFDA	114	%		1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	13C2-PFHxA	115	%		1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	111	%		1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	110	%		1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	113	%		1

**GAC-7-20200526 (202005260442)**

**Sampled on 05/26/2020 1118**

**EPA 537.1 - EPA Method 537.1**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	13C2-PFDA	113	%		1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	13C2-PFHxA	111	%		1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	108	%		1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	112	%		1

**GAC-8-20200526 (202005260443)**

Sampled on 05/26/2020 1121

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	13C2-PFDA	111	%		1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	13C2-PFHxA	116	%		1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	109	%		1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	112	%		1

**IX-5-20200526 (202005260444)**

**Sampled on 05/26/2020 1124**

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	13C2-PFDA	111	%		1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	13C2-PFHxA	109	%		1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	101	%		1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	116	%		1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	110	%		1

**IX-6-20200526 (202005260445)**

**Sampled on 05/26/2020 1127**

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	13C2-PFDA	103	%		1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	13C2-PFHxA	101	%		1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	100	%		1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	114	%		1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	106	%		1

**IX-7-20200526 (202005260446)**

Sampled on 05/26/2020 1130

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	13C2-PFDA	115	%		1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	13C2-PFHxA	112	%		1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1

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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	106	%		1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	113	%		1

**IX-8-20200526 (202005260447)**

**Sampled on 05/26/2020 1133**

**EPA 537.1 - EPA Method 537.1**

05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	13C2-PFDA	107	%		1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	13C2-PFHxA	106	%		1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	104	%		1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	110	%		1

**MB-INF-20200526 (202005260448)**

**Sampled on 05/26/2020 1136**

**EPA 200.8 - ICPMS Metals**

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution	
05/27/20	05/27/20 18:19	1251084	1251287	(EPA 200.8)	Arsenic Total ICAP/MS	1.6	ug/L	1.0	1	
05/27/20	05/27/20 18:19	1251084	1251287	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1	
05/27/20	05/27/20 18:19	1251084	1251287	(EPA 200.8)	Uranium ICAP/MS	2.2	ug/L	1.0	1	
<b>EPA 200.7 - ICP Metals</b>										
05/27/20	05/28/20 12:37	1251084	1251430	(EPA 200.7)	Calcium Total ICAP	63	mg/L	1.0	1	
05/27/20	05/28/20 12:37	1251084	1251430	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1	
05/27/20	05/28/20 12:37	1251084	1251430	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	0.10	1	
05/27/20	05/28/20 12:37	1251084	1251430	(EPA 200.7)	Potassium Total ICAP	3.9	mg/L	1.0	1	
05/27/20	05/28/20 12:37	1251084	1251430	(EPA 200.7)	Sodium Total ICAP	52	mg/L	1.0	1	
<b>SM 5310C - Total Organic Carbon</b>										
06/01/20	21:11		1252401	(SM 5310C)	Total Organic Carbon	0.77	mg/L	0.30	1	
<b>EPA 200.8 - Uranium by ICPMS as pCi/L</b>										
05/27/20	18:27			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.4 (c)	pCi/L	0.70	1	
<b>SM 2340B - Total Hardness as CaCO3 by ICP</b>										
05/28/20	14:28			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	210 (c)	mg/L	3.0	1	
<b>EPA 218.6 - Hexavalent chromium(Dissolved)</b>										
06/02/20	12:20		1252533	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.40	ug/L	0.020	1	
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>										
05/26/20	18:19		1250939	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5	
05/26/20	18:19		1250939	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5	
05/26/20	18:19		1250939	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5	
05/26/20	18:19		1250939	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1	
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>										
05/26/20	18:19		1251012	(EPA 300.0)	Chloride	52	mg/L	2.5	5	
05/26/20	18:19		1251012	(EPA 300.0)	Sulfate	78	mg/L	2.5	5	
<b>EPA 314.0 - Perchlorate</b>										
05/28/20	19:34	(1)	1251176	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1	
<b>EPA 537.1 - EPA Method 537.1</b>										
05/27/20	05/29/20 11:58		1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58		1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58		1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58		1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 11:58		1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58		1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0097	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0034	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.034	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	13C2-PFDA	110	%		1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	13C2-PFHxA	104	%		1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	97	%		1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	125	%		1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	109	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	05/28/20 09:49			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.95	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (LM)	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1

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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Bromoform	ND (VC)	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Chlorodibromomethane	ND (VC)	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Naphthalene	ND (BA,LM)	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1

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 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,2-Dichloroethane-d4	100	%		1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	4-Bromofluorobenzene	100	%		1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Toluene-d8	96	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	05/27/20 19:50		1251220	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
05/28/20	05/28/20 21:59	1251658	1251659	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	370	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	05/31/20 14:24		1251944	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<b>Field Blank - Hold (202005260460)</b>									
<b>EPA 537.1 - EPA Method 537.1</b>									
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Sampled on 05/26/2020 1137

Rounding on totals after summation.  
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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	13C2-PFDA	109	%		1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	13C2-PFHxA	120	%		1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	13C3-HFPO-DA	104	%		1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	d3-NMeFOSAA	92	%		1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	d5-NEtFOSAA	116	%		1

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**Report:** 872940  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1250939**

202005260438 LH-INF-20200526  
 202005260448 MB-INF-20200526

**Analysis Date: 05/26/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1251012**

202005260438 LH-INF-20200526  
 202005260448 MB-INF-20200526

**Analysis Date: 05/26/2020**

Analyzed by: B9PD  
 Analyzed by: B9PD

**Perchlorate**

**Analytical Batch: 1251176**

202005260438 LH-INF-20200526  
 202005260448 MB-INF-20200526

**Analysis Date: 05/28/2020**

Analyzed by: H5VG  
 Analyzed by: H5VG

**Alkalinity in CaCO3 units**

**Analytical Batch: 1251220**

202005260438 LH-INF-20200526  
 202005260448 MB-INF-20200526

**Analysis Date: 05/27/2020**

Analyzed by: ZB2Z  
 Analyzed by: ZB2Z

**ICPMS Metals**

**Prep Batch: 1251084 Analytical Batch: 1251287**

202005260438 LH-INF-20200526  
 202005260448 MB-INF-20200526

**Analysis Date: 05/27/2020**

Analyzed by: DHX7  
 Analyzed by: DHX7

**ICP Metals**

**Prep Batch: 1251084 Analytical Batch: 1251430**

202005260438 LH-INF-20200526  
 202005260448 MB-INF-20200526

**Analysis Date: 05/28/2020**

Analyzed by: NINA  
 Analyzed by: NINA

**Total Dissolved Solids (TDS)**

**Prep Batch: 1251658 Analytical Batch: 1251659**

202005260438 LH-INF-20200526  
 202005260448 MB-INF-20200526

**Analysis Date: 05/28/2020**

Analyzed by: TJ52  
 Analyzed by: TJ52

**EPA Method 537.1**

**Prep Batch: 1251157 Analytical Batch: 1251784**

202005260418 GAC-1-20200526  
 202005260431 GAC-2-20200526  
 202005260432 GAC-3-20200526  
 202005260433 GAC-4-20200526  
 202005260434 IX-1-20200526  
 202005260435 IX-2-20200526  
 202005260436 IX-3-20200526  
 202005260437 IX-4-20200526  
 202005260438 LH-INF-20200526  
 202005260439 LH-INF-DUP-20200526  
 202005260440 GAC-5-20200526  
 202005260441 GAC-6-20200526

**Analysis Date: 05/29/2020**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
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 Analyzed by: KAM



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**Report:** 872940  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District

202005260442	GAC-7-20200526	Analyzed by: KAM
202005260443	GAC-8-20200526	Analyzed by: KAM
202005260444	IX-5-20200526	Analyzed by: KAM
202005260445	IX-6-20200526	Analyzed by: KAM
202005260446	IX-7-20200526	Analyzed by: KAM
202005260447	IX-8-20200526	Analyzed by: KAM
202005260448	MB-INF-20200526	Analyzed by: KAM
<b>Total Suspended Solids (TSS)</b>		
<b>Analytical Batch: 1251944</b>		
202005260438	LH-INF-20200526	Analyzed by: TJ52
202005260448	MB-INF-20200526	Analyzed by: TJ52
<b>EPA Method 537.1</b>		
<b>Prep Batch: 1251841 Analytical Batch: 1252352</b>		
202005260460	Field Blank - Hold	Analyzed by: SZZ
<b>Total Organic Carbon</b>		
<b>Analytical Batch: 1252401</b>		
202005260448	MB-INF-20200526	Analyzed by: ZS6I
<b>Total Organic Carbon</b>		
<b>Analytical Batch: 1252402</b>		
202005260438	LH-INF-20200526	Analyzed by: ZS6I
<b>Hexavalent chromium(Dissolved)</b>		
<b>Analytical Batch: 1252533</b>		
202005260438	LH-INF-20200526	Analyzed by: TLH
202005260448	MB-INF-20200526	Analyzed by: TLH
<b>Volatile Organics by GCMS</b>		
<b>Prep Batch: 1253072 Analytical Batch: 1253202</b>		
202005260438	LH-INF-20200526	Analyzed by: TR7W
202005260448	MB-INF-20200526	Analyzed by: TR7W

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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1250939</b>					<b>Analysis Date: 05/26/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.51	mg/L	100	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.51	mg/L	101	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0533	mg/L	107	(50-150)		
MS_202005260153	Nitrate as Nitrogen by IC	8.0	2.6	10.8	mg/L	109	(80-120)		
MS_202005260438	Nitrate as Nitrogen by IC	2.8	6.5	9.41	mg/L	106	(80-120)		
MSD_202005260153	Nitrate as Nitrogen by IC	8.0	2.6	10.8	mg/L	110	(80-120)	20	0.35
MSD_202005260438	Nitrate as Nitrogen by IC	2.8	6.5	9.50	mg/L	108	(80-120)	20	0.97
LCS1	Nitrite Nitrogen by IC		1	0.968	mg/L	97	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.970	mg/L	97	(90-110)	20	0.21
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0492	mg/L	98	(50-150)		
MS_202005260153	Nitrite Nitrogen by IC	ND	1	0.965	mg/L	97	(80-120)		
MS_202005260438	Nitrite Nitrogen by IC	ND	2.5	2.46	mg/L	99	(80-120)		
MSD_202005260153	Nitrite Nitrogen by IC	ND	1	0.973	mg/L	97	(80-120)	20	0.83
MSD_202005260438	Nitrite Nitrogen by IC	ND	2.5	2.39	mg/L	96	(80-120)	20	3.0
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1251012</b>					<b>Analysis Date: 05/26/2020</b>				
LCS1	Chloride		25	25.6	mg/L	102	(90-110)		
LCS2	Chloride		25	25.7	mg/L	103	(90-110)	20	0.39
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.432	mg/L	86	(50-150)		
MS_202005260438	Chloride	110	65	170	mg/L	102	(80-120)		
MSD_202005260438	Chloride	110	65	173	mg/L	108	(80-120)	20	1.7
LCS1	Sulfate		50	50.8	mg/L	102	(90-110)		
LCS2	Sulfate		50	50.9	mg/L	102	(90-110)	20	0.0
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.952	mg/L	95	(50-150)		
MRLW	Sulfate		0.25	0.236	mg/L	94	(50-150)		
MS_202005260438	Sulfate	170	125	303	mg/L	104	(80-120)		
MSD_202005260438	Sulfate	170	125	309	mg/L	109	(80-120)	20	1.9
<b>Perchlorate by EPA 314.0</b>									
<b>Analytical Batch: 1251176</b>					<b>Analysis Date: 05/28/2020</b>				
LCS1	Perchlorate		25	25.4	ug/L	101	(85-115)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perchlorate		25	25.2	ug/L	101	(85-115)	15	0.79
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	3.84	ug/L	96	(75-125)		
MS_202005200604	Perchlorate	ND	25	24.7	ug/L	99	(80-120)		
MSD_202005200604	Perchlorate	ND	25	24.3	ug/L	97	(80-120)	15	1.6

**Alkalinity in CaCO3 units by SM 2320B**  
**Analytical Batch: 1251220**

**Analysis Date: 05/27/2020**

LCS1	Alkalinity in CaCO3 units		100	99.8	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.6	mg/L	100	(90-110)	20	0.20
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.84	mg/L	92	(50-150)		
MS_202004160356	Alkalinity in CaCO3 units	2.5	100	106	mg/L	104	(80-120)		
MS_202005220164	Alkalinity in CaCO3 units	140	100	242	mg/L	104	(80-120)		
MSD_202004160356	Alkalinity in CaCO3 units	2.5	100	108	mg/L	106	(80-120)	20	2.3
MSD_202005220164	Alkalinity in CaCO3 units	140	100	243	mg/L	104	(80-120)	20	0.24

**ICPMS Metals by EPA 200.8**

**Analytical Batch: 1251287**

**Analysis Date: 05/27/2020**

LCS1	Arsenic Total ICAP/MS		50	49.3	ug/L	99	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	48.8	ug/L	98	(85-115)	20	1.0
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.05	ug/L	105	(50-150)		
MS_202005220334	Arsenic Total ICAP/MS	7.4	50	58.7	ug/L	102	(70-130)		
MS2_202005260243	Arsenic Total ICAP/MS	ND	50	51.9	ug/L	102	(70-130)		
MSD_202005220334	Arsenic Total ICAP/MS	7.4	50	55.6	ug/L	96	(70-130)	20	5.4
MSD2_202005260243	Arsenic Total ICAP/MS	ND	50	51.2	ug/L	100	(70-130)	20	1.4
LCS1	Manganese Total ICAP/MS		100	98.3	ug/L	98	(85-115)		
LCS2	Manganese Total ICAP/MS		100	97.7	ug/L	98	(85-115)	20	0.61
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	1.98	ug/L	99	(50-150)		
MS_202005220334	Manganese Total ICAP/MS	ND	100	93.2	ug/L	93	(70-130)		
MS2_202005260243	Manganese Total ICAP/MS	ND	100	91.4	ug/L	91	(70-130)		
MSD_202005220334	Manganese Total ICAP/MS	ND	100	87.6	ug/L	88	(70-130)	20	6.2
MSD2_202005260243	Manganese Total ICAP/MS	ND	100	89.0	ug/L	89	(70-130)	20	2.7
LCS1	Uranium ICAP/MS		50	50.0	ug/L	100	(85-115)		
LCS2	Uranium ICAP/MS		50	49.4	ug/L	99	(85-115)	20	1.2
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.951	ug/L	95	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202005220334	Uranium ICAP/MS	5.7	50	55.5	ug/L	100	(70-130)		
MS2_202005260243	Uranium ICAP/MS	16	50	65.2	ug/L	99	(70-130)		
MSD_202005220334	Uranium ICAP/MS	5.7	50	52.0	ug/L	93	(70-130)	20	6.5
MSD2_202005260243	Uranium ICAP/MS	16	50	62.9	ug/L	95	(70-130)	20	3.6

ICP Metals by EPA 200.7

Analytical Batch: 1251430

Analysis Date: 05/28/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Calcium Total ICAP		50	49.9	mg/L	100	(85-115)		
LCS2	Calcium Total ICAP		50	49.9	mg/L	100	(85-115)	20	0.0
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.988	mg/L	99	(50-150)		
MS_202005260739	Calcium Total ICAP	46	50	92.4	mg/L	94	(70-130)		
MS2_202004220528	Calcium Total ICAP	97	50	141	mg/L	88	(70-130)		
MSD_202005260739	Calcium Total ICAP	46	50	92.4	mg/L	94	(70-130)	20	0.027
MSD2_202004220528	Calcium Total ICAP	97	50	140	mg/L	87	(70-130)	20	0.62
LCS1	Iron Total ICAP		5	5.03	mg/L	101	(85-115)		
LCS2	Iron Total ICAP		5	5.01	mg/L	100	(85-115)	20	0.40
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0210	mg/L	105	(50-150)		
MS_202005260739	Iron Total ICAP	ND	5	4.97	mg/L	99	(70-130)		
MS2_202004220528	Iron Total ICAP	ND	5	4.95	mg/L	99	(70-130)		
MSD_202005260739	Iron Total ICAP	ND	5	4.97	mg/L	99	(70-130)	20	0.019
MSD2_202004220528	Iron Total ICAP	ND	5	4.93	mg/L	99	(70-130)	20	0.46
LCS1	Magnesium Total ICAP		20	19.9	mg/L	100	(85-115)		
LCS2	Magnesium Total ICAP		20	19.8	mg/L	99	(85-115)	20	0.50
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0972	mg/L	97	(50-150)		
MS_202005260739	Magnesium Total ICAP	10	20	29.9	mg/L	98	(70-130)		
MS2_202004220528	Magnesium Total ICAP	30	20	49.0	mg/L	94	(70-130)		
MSD_202005260739	Magnesium Total ICAP	10	20	29.8	mg/L	97	(70-130)	20	0.24
MSD2_202004220528	Magnesium Total ICAP	30	20	48.9	mg/L	94	(70-130)	20	0.24
LCS1	Potassium Total ICAP		20	20.0	mg/L	100	(85-115)		
LCS2	Potassium Total ICAP		20	19.9	mg/L	100	(85-115)	20	0.50
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.707	mg/L	71	(50-150)		
MS_202005260739	Potassium Total ICAP	2.1	20	23.1	mg/L	105	(70-130)		
MS2_202004220528	Potassium Total ICAP	1.7	20	23.0	mg/L	107	(70-130)		
MSD_202005260739	Potassium Total ICAP	2.1	20	23.1	mg/L	105	(70-130)	20	0.073

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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD2_202004220528	Potassium Total ICAP	1.7	20	22.9	mg/L	106	(70-130)	20	0.63
LCS1	Sodium Total ICAP		50	49.7	mg/L	100	(85-115)		
LCS2	Sodium Total ICAP		50	49.5	mg/L	99	(85-115)	20	0.40
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.839	mg/L	84	(50-150)		
MS_202005260739	Sodium Total ICAP	36	50	82.9	mg/L	94	(70-130)		
MS2_202004220528	Sodium Total ICAP	34	50	81.0	mg/L	94	(70-130)		
MSD_202005260739	Sodium Total ICAP	36	50	83.4	mg/L	94	(70-130)	20	0.56
MSD2_202004220528	Sodium Total ICAP	34	50	80.8	mg/L	94	(70-130)	20	0.21

Total Dissolved Solids (TDS) by E160.1/SM2540C

Analytical Batch: 1251659

Analysis Date: 05/28/2020

DUP	Total Dissolved Solid (TDS)	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202005220226	Total Dissolved Solid (TDS)	610		614	mg/L		(0-10)	10	0.0
DUP_202005260928	Total Dissolved Solid (TDS)	730		736	mg/L		(0-10)	10	0.82
LCS1	Total Dissolved Solid (TDS)		175	172	mg/L	98	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	680	mg/L	97	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	10.0	mg/L	100	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1251157 Analytical Batch: 1251784

Analysis Date: 05/29/2020

LCS	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0252	ug/L	107	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0267	ug/L	113	(70-130)	30	5.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00206	ug/L	110	(50-150)		
MS_202005260065	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00210	ug/L	112	(50-150)		
MSD_202005260065	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00210	ug/L	112	(50-150)	50	0.018
LCS1	13C2-PFDA (S)		100	117	%	117	(70-130)		
LCS2	13C2-PFDA (S)		100	115	%	115	(70-130)		
MBLK	13C2-PFDA (S)			112	%	112	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	109	%	109	(70-130)		
MS_202005260065	13C2-PFDA (S)		100	115	%	115	(70-130)		
MSD_202005260065	13C2-PFDA (S)		100	112	%	112	(70-130)		
LCS1	13C2-PFHxA (S)		100	121	%	121	(70-130)		
LCS2	13C2-PFHxA (S)		100	116	%	117	(70-130)		
MBLK	13C2-PFHxA (S)			110	%	110	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	114	%	114	(70-130)		
MS_202005260065	13C2-PFHxA (S)		100	114	%	114	(70-130)		
MSD_202005260065	13C2-PFHxA (S)		100	113	%	113	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	102	%	103	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			105	%	105	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MS_202005260065	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MSD_202005260065	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	112	%	112	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	110	%	111	(70-130)		
MBLK	13C3-HFPO-DA (S)			107	%	107	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
MS_202005260065	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
MSD_202005260065	13C3-HFPO-DA (S)		100	109	%	109	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			103	%	103	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS_202005260065	13C4-PFOS- IS#2 (I)		100	109	%	109	(50-150)		
MSD_202005260065	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0237	ug/L	100	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0246	ug/L	104	(70-130)	30	3.7
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00198	ug/L	105	(50-150)		
MS_202005260065	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00206	ug/L	109	(50-150)		
MSD_202005260065	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00200	ug/L	106	(50-150)	50	3.1
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0225	ug/L	97	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0242	ug/L	104	(70-130)	30	7.3
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00183	ug/L	99	(50-150)		
MS_202005260065	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00193	ug/L	104	(50-150)		
MSD_202005260065	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00190	ug/L	102	(50-150)	50	1.7
LCS1	d3-NMeFOSAA (I)		100	113	%	113	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
MBLK	d3-NMeFOSAA (I)			112	%	113	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	115	%	115	(50-150)		
MS_202005260065	d3-NMeFOSAA (I)		100	114	%	114	(50-150)		
MSD_202005260065	d3-NMeFOSAA (I)		100	112	%	113	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	112	%	113	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 872940  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	d5-NEtFOSAA (S)			110	%	110	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	108	%	108	(70-130)		
MS_202005260065	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
MSD_202005260065	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0244	ug/L	98	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0265	ug/L	106	(70-130)	30	8.3
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00198	ug/L	99	(50-150)		
MS_202005260065	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00206	ug/L	103	(50-150)		
MSD_202005260065	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00197	ug/L	99	(50-150)	50	4.2
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0243	ug/L	97	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0254	ug/L	101	(70-130)	30	4.4
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00202	ug/L	101	(50-150)		
MS_202005260065	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202005260065	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00206	ug/L	103	(50-150)	50	4.8
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0240	ug/L	96	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0252	ug/L	101	(70-130)	30	4.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00197	ug/L	98	(50-150)		
MS_202005260065	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00209	ug/L	105	(50-150)		
MSD_202005260065	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00203	ug/L	102	(50-150)	50	3.1
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0214	ug/L	97	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0229	ug/L	104	(70-130)	30	6.8
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00183	ug/L	103	(50-150)		
MS_202005260065	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00187	ug/L	106	(50-150)		
MSD_202005260065	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00190	ug/L	107	(50-150)	50	1.7
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0255	ug/L	102	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0272	ug/L	109	(70-130)	30	6.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202005260065	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202005260065	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00233	ug/L	117	(50-150)	50	7.3
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0258	ug/L	103	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0274	ug/L	110	(70-130)	30	5.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00204	ug/L	102	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 872940  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202005260065	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00224	ug/L	112	(50-150)		
MSD_202005260065	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00218	ug/L	109	(50-150)	50	2.7
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0267	ug/L	107	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0282	ug/L	113	(70-130)	30	5.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00230	ug/L	115	(50-150)		
MS_202005260065	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00237	ug/L	117	(50-150)		
MSD_202005260065	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00228	ug/L	112	(50-150)	50	4.0
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0223	ug/L	98	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0242	ug/L	106	(70-130)	30	8.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00192	ug/L	105	(50-150)		
MS_202005260065	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00200	ug/L	110	(50-150)		
MSD_202005260065	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00202	ug/L	111	(50-150)	50	1.1
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0259	ug/L	103	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0273	ug/L	109	(70-130)	30	5.3
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00224	ug/L	112	(50-150)		
MS_202005260065	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00221	ug/L	105	(50-150)		
MSD_202005260065	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00228	ug/L	109	(50-150)	50	3.3
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0269	ug/L	108	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0281	ug/L	112	(70-130)	30	4.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202005260065	Perfluorononanoic acid (PFNA)	ND	0.002	0.00219	ug/L	109	(50-150)		
MSD_202005260065	Perfluorononanoic acid (PFNA)	ND	0.002	0.00236	ug/L	118	(50-150)	50	7.6
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0232	ug/L	100	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0244	ug/L	105	(70-130)	30	5.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00202	ug/L	109	(50-150)		
MS_202005260065	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00204	ug/L	105	(50-150)		
MSD_202005260065	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00205	ug/L	106	(50-150)	50	0.55
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0256	ug/L	102	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0274	ug/L	109	(70-130)	30	6.8
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00222	ug/L	111	(50-150)		
MS_202005260065	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00240	ug/L	113	(50-150)		
MSD_202005260065	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00225	ug/L	105	(50-150)	50	6.5

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.



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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0301	ug/L	120	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0313	ug/L	125	(70-130)	30	3.9
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00257	ug/L	128	(50-150)		
MS_202005260065	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00274	ug/L	122	(50-150)		
MSD_202005260065	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00284	ug/L	127	(50-150)	50	3.6
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0264	ug/L	106	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0283	ug/L	113	(70-130)	30	6.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202005260065	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00229	ug/L	114	(50-150)		
MSD_202005260065	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00229	ug/L	115	(50-150)	50	0.077
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0278	ug/L	111	(70-130)	30	7.8
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00223	ug/L	111	(50-150)		
MS_202005260065	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00221	ug/L	110	(50-150)		
MSD_202005260065	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00221	ug/L	111	(50-150)	50	0.11

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1251944

Analysis Date: 05/31/2020

DUP_202004220040	Total Suspended Solids (TSS)	280		258	mg/L		(0-10)	10	9.6
DUP_202004220077	Total Suspended Solids (TSS)	98		96.0	mg/L		(0-10)	10	2.1
LCS1	Total Suspended Solids (TSS)		175	164	mg/L	94	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	160	mg/L	91	(71-107)	20	2.5
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	8.00	mg/L	80	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1251841 Analytical Batch: 1252352

Analysis Date: 06/01/2020

DUP_202005280429	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0219	ug/L	93	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0223	ug/L	95	(70-130)	30	1.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00170	ug/L	91	(50-150)		
MS2_202005280146	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0436	ug/L	93	(70-130)		
DUP_202005280429	13C2-PFDA (S)			110	%	110	(70-130)		
LCS1	13C2-PFDA (S)		100	117	%	117	(70-130)		
LCS2	13C2-PFDA (S)		100	113	%	113	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFDA (S)			112	%	112	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	110	%	111	(70-130)		
MS2_202005280146	13C2-PFDA (S)		100	115	%	115	(70-130)		
DUP_202005280429	13C2-PFHxA (S)			113	%	113	(70-130)		
LCS1	13C2-PFHxA (S)		100	124	%	124	(70-130)		
LCS2	13C2-PFHxA (S)		100	122	%	122	(70-130)		
MBLK	13C2-PFHxA (S)			116	%	116	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	116	%	116	(70-130)		
MS2_202005280146	13C2-PFHxA (S)		100	121	%	121	(70-130)		
DUP_202005280429	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			108	%	109	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
MS2_202005280146	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
DUP_202005280429	13C3-HFPO-DA (S)			107	%	107	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	113	%	113	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	109	%	109	(70-130)		
MBLK	13C3-HFPO-DA (S)			105	%	105	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MS2_202005280146	13C3-HFPO-DA (S)		100	110	%	110	(70-130)		
DUP_202005280429	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	104	%	105	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			107	%	107	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS2_202005280146	13C4-PFOS- IS#2 (I)		100	99.7	%	100	(50-150)		
DUP_202005280429	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0264	ug/L	112	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0259	ug/L	110	(70-130)	30	1.9
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00194	ug/L	103	(50-150)		
MS2_202005280146	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0469	ug/L	97	(70-130)		
DUP_202005280429	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0232	ug/L	100	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0243	ug/L	104	(70-130)	30	4.6
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00181	ug/L	97	(50-150)		

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202005280146	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0458	ug/L	98	(70-130)		
DUP_202005280429	d3-NMeFOSAA (I)			95.1	%	95	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MBLK	d3-NMeFOSAA (I)			109	%	109	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
MS2_202005280146	d3-NMeFOSAA (I)		100	96.9	%	97	(50-150)		
DUP_202005280429	d5-NEtFOSAA (S)			112	%	113	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	110	%	110	(70-130)		
MBLK	d5-NEtFOSAA (S)			117	%	117	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MS2_202005280146	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
DUP_202005280429	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0228	ug/L	91	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0227	ug/L	91	(70-130)	30	0.44
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00170	ug/L	85	(50-150)		
MS2_202005280146	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0454	ug/L	91	(70-130)		
DUP_202005280429	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0247	ug/L	99	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0248	ug/L	99	(70-130)	30	0.40
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS2_202005280146	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0455	ug/L	91	(70-130)		
DUP_202005280429	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0257	ug/L	103	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0257	ug/L	103	(70-130)	30	0.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00225	ug/L	112	(50-150)		
MS2_202005280146	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0479	ug/L	96	(70-130)		
DUP_202005280429	Perfluorobutanesulfonic acid (PFBS)	0.0056		0.00542	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0235	ug/L	106	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0234	ug/L	106	(70-130)	30	0.43
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00189	ug/L	107	(50-150)		
MS2_202005280146	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0455	ug/L	103	(70-130)		
DUP_202005280429	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 872940  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0256	ug/L	103	(70-130)	30	1.2
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00198	ug/L	99	(50-150)		
MS2_202005280146	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0483	ug/L	97	(70-130)		
DUP_202005280429	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0256	ug/L	102	(70-130)	30	0.78
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00200	ug/L	100	(50-150)		
MS2_202005280146	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0484	ug/L	97	(70-130)		
DUP_202005280429	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0282	ug/L	113	(70-130)	30	0.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00221	ug/L	111	(50-150)		
MS2_202005280146	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0521	ug/L	104	(70-130)		
DUP_202005280429	Perfluorohexanesulfonic acid (PFHxS)	0.0035		0.00359	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0252	ug/L	110	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0253	ug/L	111	(70-130)	30	0.40
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00200	ug/L	109	(50-150)		
MS2_202005280146	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0490	ug/L	107	(70-130)		
DUP_202005280429	Perfluorohexanoic acid (PFHxA)	0.0096		0.00948	ug/L		(0-30)	30	1.4
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0274	ug/L	109	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0268	ug/L	107	(70-130)	30	2.2
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00215	ug/L	107	(50-150)		
MS2_202005280146	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0539	ug/L	108	(70-130)		
DUP_202005280429	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0265	ug/L	106	(70-130)	30	1.1
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00209	ug/L	104	(50-150)		
MS2_202005280146	Perfluorononanoic acid (PFNA)	ND	0.05	0.0500	ug/L	100	(70-130)		
DUP_202005280429	Perfluorooctanesulfonic acid (PFOS)	0.0034		0.00339	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0242	ug/L	105	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0248	ug/L	107	(70-130)	30	2.5

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00206	ug/L	111	(50-150)		
MS2_202005280146	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0464	ug/L	100	(70-130)		
DUP_202005280429	Perfluorooctanoic acid (PFOA)	0.0071		0.00716	ug/L		(0-30)	30	0.75
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0276	ug/L	110	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0265	ug/L	106	(70-130)	30	4.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00225	ug/L	112	(50-150)		
MS2_202005280146	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0521	ug/L	104	(70-130)		
DUP_202005280429	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0248	ug/L	99	(70-130)	30	0.80
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00185	ug/L	92	(50-150)		
MS2_202005280146	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0467	ug/L	93	(70-130)		
DUP_202005280429	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0242	ug/L	97	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0242	ug/L	97	(70-130)	30	0.41
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00184	ug/L	92	(50-150)		
MS2_202005280146	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0457	ug/L	91	(70-130)		
DUP_202005280429	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0249	ug/L	100	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0244	ug/L	98	(70-130)	30	2.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00194	ug/L	97	(50-150)		
MS2_202005280146	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0482	ug/L	96	(70-130)		

Total Organic Carbon by SM 5310C

Analytical Batch: 1252401

Analysis Date: 06/01/2020

LCS1	Total Organic Carbon		5	4.81	mg/L	96	(90-110)		
LCS2	Total Organic Carbon		5	4.93	mg/L	99	(90-110)	20	2.5
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.230	mg/L	115	(50-150)		
MS_202005260448	Total Organic Carbon	0.77	4	4.62	mg/L	96	(80-120)		
MS2_202002160048	Total Organic Carbon	0.34	2	2.24	mg/L	95	(80-120)		
MSD_202005260448	Total Organic Carbon	0.77	4	4.65	mg/L	97	(80-120)	20	0.56
MSD2_202002160048	Total Organic Carbon	0.34	2	2.22	mg/L	94	(80-120)	20	0.94

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Report: 872940  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Total Organic Carbon by SM 5310C</b>									
<b>Analytical Batch: 1252402</b>					<b>Analysis Date: 06/02/2020</b>				
LCS1	Total Organic Carbon		5	4.91	mg/L	98	(90-110)		
LCS2	Total Organic Carbon		5	4.94	mg/L	99	(90-110)	20	0.61
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.236	mg/L	118	(50-150)		
MS_202004160352	Total Organic Carbon	1.8	4	5.63	mg/L	96	(80-120)		
MSD_202004160352	Total Organic Carbon	1.8	4	5.68	mg/L	97	(80-120)	20	0.88
<b>Hexavalent chromium(Dissolved) by EPA 218.6</b>									
<b>Analytical Batch: 1252533</b>					<b>Analysis Date: 06/02/2020</b>				
LCS1	Hexavalent chromium(Dissolved)		2	1.99	ug/L	100	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	2.01	ug/L	100	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0211	ug/L	106	(50-150)		
MS_202005260448	Hexavalent chromium(Dissolved)	0.40	2	2.53	ug/L	106	(90-110)		
MSD_202005260448	Hexavalent chromium(Dissolved)	0.40	2	2.56	ug/L	108	(90-110)	20	1.1
<b>Volatile Organics by GCMS by EPA 524.2</b>									
<b>Analytical Batch: 1253202</b>					<b>Analysis Date: 06/04/2020</b>				
LCS1	1,1,1,2-Tetrachloroethane		5	5.14	ug/L	103	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	4.77	ug/L	95	(70-130)	20	7.5
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.63	ug/L	93	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.67	ug/L	93	(70-130)	20	0.86
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.430	ug/L	86	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	4.74	ug/L	95	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	4.94	ug/L	99	(70-130)	20	4.1
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.89	ug/L	98	(70-130)		
LCS2	1,1,2-Trichloroethane		5	5.17	ug/L	103	(70-130)	20	5.6
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,1-Dichloroethane		5	5.02	ug/L	100	(70-130)		
LCS2	1,1-Dichloroethane		5	4.82	ug/L	96	(70-130)	20	4.1

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Report: 872940  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.560	ug/L	112	(50-150)		
LCS1	1,1-Dichloroethylene		5	4.56	ug/L	91	(70-130)		
LCS2	1,1-Dichloroethylene		5	4.79	ug/L	96	(70-130)	20	4.9
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.400	ug/L	80	(50-150)		
LCS1	1,1-Dichloropropene		5	4.30	ug/L	86	(70-130)		
LCS2	1,1-Dichloropropene		5	4.25	ug/L	85	(70-130)	20	1.2
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.400	ug/L	80	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.35	ug/L	87	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	4.92	ug/L	98	(70-130)	20	12
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.790	ug/L	<u>158</u>	(50-150)		
LCS1	1,2,3-Trichloropropane		5	4.93	ug/L	99	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.10	ug/L	102	(70-130)	20	3.4
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.50	ug/L	90	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	4.79	ug/L	96	(70-130)	20	6.2
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.600	ug/L	120	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.64	ug/L	93	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	4.24	ug/L	85	(70-130)	20	9.0
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,2-Dichloroethane		5	5.09	ug/L	102	(70-130)		
LCS2	1,2-Dichloroethane		5	5.26	ug/L	105	(70-130)	20	3.3
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	104	%	104	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			103	%	103	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	104	%	104	(70-130)		
LCS1	1,2-Dichloropropane		5	5.01	ug/L	100	(70-130)		
LCS2	1,2-Dichloropropane		5	4.98	ug/L	100	(70-130)	20	0.60
MBLK	1,2-Dichloropropane			<0.5	ug/L				

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Report: 872940  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	1,2-Dichloropropane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.58	ug/L	92	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.06	ug/L	81	(70-130)	20	12
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.410	ug/L	82	(50-150)		
LCS1	1,3-Dichloropropane		5	5.00	ug/L	100	(70-130)		
LCS2	1,3-Dichloropropane		5	4.96	ug/L	99	(70-130)	20	0.80
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.510	ug/L	102	(50-150)		
LCS1	2,2-Dichloropropane		5	4.73	ug/L	95	(70-130)		
LCS2	2,2-Dichloropropane		5	4.50	ug/L	90	(70-130)	20	5.0
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.450	ug/L	90	(50-150)		
LCS1	2-Butanone (MEK)		50	48.1	ug/L	96	(70-130)		
LCS2	2-Butanone (MEK)		50	52.6	ug/L	105	(70-130)	20	8.9
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.18	ug/L	104	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	96.6	%	97	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	95.0	%	95	(70-130)		
MBLK	4-Bromofluorobenzene (S)			93.0	%	93	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	98.2	%	98	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	94.0	%	94	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	51.4	ug/L	103	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	57.1	ug/L	114	(70-130)	20	11
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.65	ug/L	93	(50-150)		
LCS1	Benzene		5	4.99	ug/L	100	(70-130)		
LCS2	Benzene		5	4.86	ug/L	97	(70-130)	20	2.6
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Bromobenzene		5	4.88	ug/L	98	(70-130)		
LCS2	Bromobenzene		5	4.58	ug/L	92	(70-130)	20	6.3
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.530	ug/L	106	(50-150)		
LCS1	Bromochloromethane		5	5.09	ug/L	102	(70-130)		
LCS2	Bromochloromethane		5	4.57	ug/L	91	(70-130)	20	11
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.600	ug/L	120	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Bromodichloromethane		5	5.23	ug/L	105	(70-130)		
LCS2	Bromodichloromethane		5	5.31	ug/L	106	(70-130)	20	1.5
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	Bromoethane		5	4.89	ug/L	98	(70-130)		
LCS2	Bromoethane		5	4.51	ug/L	90	(70-130)	20	8.1
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Bromoform		5	5.74	ug/L	115	(70-130)		
LCS2	Bromoform		5	5.88	ug/L	118	(70-130)	20	2.4
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.590	ug/L	118	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.30	ug/L	106	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.09	ug/L	102	(70-130)	20	4.0
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.610	ug/L	122	(50-150)		
LCS1	Carbon disulfide		5	5.31	ug/L	106	(70-130)		
LCS2	Carbon disulfide		5	5.28	ug/L	106	(70-130)	20	0.57
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.490	ug/L	98	(50-150)		
LCS1	Carbon Tetrachloride		5	4.68	ug/L	94	(70-130)		
LCS2	Carbon Tetrachloride		5	4.50	ug/L	90	(70-130)	20	3.9
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.360	ug/L	72	(50-150)		
LCS1	Chlorobenzene		5	4.98	ug/L	100	(70-130)		
LCS2	Chlorobenzene		5	4.95	ug/L	99	(70-130)	20	0.60
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.460	ug/L	92	(50-150)		
LCS1	Chlorodibromomethane		5	5.61	ug/L	112	(70-130)		
LCS2	Chlorodibromomethane		5	5.82	ug/L	116	(70-130)	20	3.7
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	Chloroethane		5	4.89	ug/L	98	(70-130)		
LCS2	Chloroethane		5	4.97	ug/L	99	(70-130)	20	1.6
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.250	ug/L	50	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.98	ug/L	100	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	4.82	ug/L	96	(70-130)	20	3.3

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 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.500	ug/L	100	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	5.34	ug/L	107	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.45	ug/L	89	(70-130)	20	18
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.370	ug/L	74	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.62	ug/L	92	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.49	ug/L	90	(70-130)	20	2.9
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.500	ug/L	100	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	5.64	ug/L	113	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	5.78	ug/L	116	(70-130)	20	2.5
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.710	ug/L	142	(50-150)		
LCS1	Dibromomethane		5	4.88	ug/L	98	(70-130)		
LCS2	Dibromomethane		5	4.73	ug/L	95	(70-130)	20	3.1
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	Dichlorodifluoromethane		5	4.90	ug/L	98	(70-130)		
LCS2	Dichlorodifluoromethane		5	4.83	ug/L	97	(70-130)	20	1.4
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.360	ug/L	72	(50-150)		
LCS1	Dichloromethane		5	4.78	ug/L	96	(70-130)		
LCS2	Dichloromethane		5	4.80	ug/L	96	(70-130)	20	0.42
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	Di-isopropyl ether		5	4.74	ug/L	95	(70-130)		
LCS2	Di-isopropyl ether		5	4.80	ug/L	96	(70-130)	20	1.3
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.520	ug/L	104	(50-150)		
LCS1	Ethyl benzene		5	4.83	ug/L	97	(70-130)		
LCS2	Ethyl benzene		5	4.64	ug/L	93	(70-130)	20	4.0
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	Hexachlorobutadiene		5	4.57	ug/L	91	(70-130)		
LCS2	Hexachlorobutadiene		5	4.91	ug/L	98	(70-130)	20	7.2
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.590	ug/L	118	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Isopropylbenzene		5	4.58	ug/L	92	(70-130)		
LCS2	Isopropylbenzene		5	4.26	ug/L	85	(70-130)	20	7.2
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	m,p-Xylenes		10	9.77	ug/L	98	(70-130)		
LCS2	m,p-Xylenes		10	9.28	ug/L	93	(70-130)	20	5.1
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.830	ug/L	83	(50-150)		
MRL_W	m,p-Xylenes		0.5	0.450	ug/L	90	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.93	ug/L	99	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	4.68	ug/L	94	(70-130)	20	5.2
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.490	ug/L	98	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	5.09	ug/L	102	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	5.39	ug/L	108	(70-130)	20	5.7
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.540	ug/L	108	(50-150)		
LCS1	Naphthalene		5	4.25	ug/L	85	(70-130)		
LCS2	Naphthalene		5	5.07	ug/L	101	(70-130)	20	18
MBLK	Naphthalene			<u>0.500</u>	ug/L				
MRL_CHK	Naphthalene		0.5	0.970	ug/L	<u>194</u>	(50-150)		
LCS1	n-Butylbenzene		5	4.34	ug/L	87	(70-130)		
LCS2	n-Butylbenzene		5	4.23	ug/L	85	(70-130)	20	2.6
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	n-Propylbenzene		5	4.52	ug/L	90	(70-130)		
LCS2	n-Propylbenzene		5	4.22	ug/L	84	(70-130)	20	6.9
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.440	ug/L	88	(50-150)		
LCS1	o-Chlorotoluene		5	4.72	ug/L	94	(70-130)		
LCS2	o-Chlorotoluene		5	4.70	ug/L	94	(70-130)	20	0.43
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.480	ug/L	96	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.90	ug/L	98	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	4.89	ug/L	98	(70-130)	20	0.20
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.540	ug/L	108	(50-150)		
LCS1	o-Xylene		5	4.83	ug/L	97	(70-130)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 872940  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	o-Xylene		5	4.72	ug/L	94	(70-130)	20	2.3
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.420	ug/L	84	(50-150)		
LCS1	p-Chlorotoluene		5	4.83	ug/L	97	(70-130)		
LCS2	p-Chlorotoluene		5	4.63	ug/L	93	(70-130)	20	4.2
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.460	ug/L	92	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	4.73	ug/L	95	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	4.58	ug/L	92	(70-130)	20	3.2
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.550	ug/L	110	(50-150)		
LCS1	p-Isopropyltoluene		5	4.54	ug/L	91	(70-130)		
LCS2	p-Isopropyltoluene		5	4.24	ug/L	85	(70-130)	20	6.8
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.370	ug/L	74	(50-150)		
LCS1	sec-Butylbenzene		5	4.81	ug/L	96	(70-130)		
LCS2	sec-Butylbenzene		5	4.45	ug/L	89	(70-130)	20	7.8
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	Styrene		5	4.88	ug/L	98	(70-130)		
LCS2	Styrene		5	4.53	ug/L	91	(70-130)	20	7.4
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.410	ug/L	82	(50-150)		
LCS1	tert-amyl Methyl Ether		5	4.57	ug/L	91	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.92	ug/L	98	(70-130)	20	7.4
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.350	ug/L	70	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	4.94	ug/L	99	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	4.90	ug/L	98	(70-130)	20	0.81
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.460	ug/L	92	(50-150)		
LCS1	tert-Butylbenzene		5	4.47	ug/L	89	(70-130)		
LCS2	tert-Butylbenzene		5	4.25	ug/L	85	(70-130)	20	5.0
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.400	ug/L	80	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.64	ug/L	93	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.39	ug/L	88	(70-130)	20	5.5
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.430	ug/L	86	(50-150)		
LCS1	Toluene		5	4.91	ug/L	98	(70-130)		
LCS2	Toluene		5	4.77	ug/L	95	(70-130)	20	2.9
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.440	ug/L	88	(50-150)		
LCS1	Toluene-d8 (S)		5	105	%	105	(70-130)		
LCS2	Toluene-d8 (S)		5	109	%	109	(70-130)		
MBLK	Toluene-d8 (S)			98.6	%	99	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	102	%	102	(70-130)		
MRLLLW	Toluene-d8 (S)		5	96.4	%	96	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	5.09	ug/L	102	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	4.93	ug/L	99	(70-130)	20	3.2
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.480	ug/L	96	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	5.46	ug/L	109	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	5.71	ug/L	114	(70-130)	20	4.5
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.710	ug/L	142	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.77	ug/L	95	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.82	ug/L	96	(70-130)	20	1.0
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.480	ug/L	96	(50-150)		
LCS1	Trichlorofluoromethane		5	4.09	ug/L	82	(70-130)		
LCS2	Trichlorofluoromethane		5	4.09	ug/L	82	(70-130)	20	0.0
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.370	ug/L	74	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	4.50	ug/L	90	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	4.60	ug/L	92	(70-130)	20	2.2
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.400	ug/L	80	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.94	ug/L	99	(70-130)		
LCS2	Vinyl chloride (VC)		5	4.81	ug/L	96	(70-130)	20	2.7
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.440	ug/L	88	(50-150)		
MRLLLW	Vinyl chloride (VC)		0.25	0.280	ug/L	112	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 06/06/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 06/06/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 06/06/2020

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**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for  
Presence or Absence, Quantification of Total Coliform and E. Coli  
By Quantitray**

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	Total Coliform	E. Coli Large	Total Coliform	Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 06/06/2020

Quant Report - Page 1 of 1

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## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-29198-1  
Client Project/Site: 872940

For:  
Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:  
5/29/2020 8:52:10 AM

Lori Thompson, Project Manager I  
(714)895-5494  
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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 872940

Job ID: 570-29198-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 872940

Job ID: 570-29198-1

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**Job ID: 570-29198-1**

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**Laboratory: Eurofins Calscience LLC**

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## Narrative

**Job Narrative**  
**570-29198-1**

### Comments

No additional comments.

### Receipt

The samples were received on 5/27/2020 11:47 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2° C.

### GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

### Organic Prep

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-71847. LCS/LCSD was performed to meet QC requirement.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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# Detection Summary

Client: Eurofins Eaton Analytical  
Project/Site: 872940

Job ID: 570-29198-1

**Client Sample ID: 202005260438**

**Lab Sample ID: 570-29198-1**

No Detections.

**Client Sample ID: 202005260448**

**Lab Sample ID: 570-29198-2**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 872940

Job ID: 570-29198-1

## General Chemistry

**Client Sample ID: 202005260438**

**Date Collected: 05/26/20 09:36**

**Date Received: 05/27/20 11:47**

**Lab Sample ID: 570-29198-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.959	0.767	mg/L		05/28/20 09:49	05/28/20 09:49	1

**Client Sample ID: 202005260448**

**Date Collected: 05/26/20 11:36**

**Date Received: 05/27/20 11:47**

**Lab Sample ID: 570-29198-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.953	0.762	mg/L		05/28/20 09:49	05/28/20 09:49	1



# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 872940

Job ID: 570-29198-1

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 570-71847/1-A**  
**Matrix: Water**  
**Analysis Batch: 71883**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 71847**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		05/28/20 09:49	05/28/20 09:49	1

**Lab Sample ID: LCS 570-71847/2-A**  
**Matrix: Water**  
**Analysis Batch: 71883**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 71847**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	36.40		mg/L		91	78 - 114

**Lab Sample ID: LCSD 570-71847/3-A**  
**Matrix: Water**  
**Analysis Batch: 71883**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 71847**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	36.50		mg/L		91	78 - 114	0	18

# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 872940

Job ID: 570-29198-1

## General Chemistry

### Prep Batch: 71847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-29198-1	202005260438	Total/NA	Water	1664A	
570-29198-2	202005260448	Total/NA	Water	1664A	
MB 570-71847/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-71847/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-71847/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

### Analysis Batch: 71883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-29198-1	202005260438	Total/NA	Water	1664A	71847
570-29198-2	202005260448	Total/NA	Water	1664A	71847
MB 570-71847/1-A	Method Blank	Total/NA	Water	1664A	71847
LCS 570-71847/2-A	Lab Control Sample	Total/NA	Water	1664A	71847
LCSD 570-71847/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	71847

# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 872940

Job ID: 570-29198-1

**Client Sample ID: 202005260438**

**Lab Sample ID: 570-29198-1**

**Date Collected: 05/26/20 09:36**

**Matrix: Water**

**Date Received: 05/27/20 11:47**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1043 mL	1000 mL	71847	05/28/20 09:49	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			71883	05/28/20 09:49	UWEZ	ECL 1
Instrument ID: NOEQUIP										

**Client Sample ID: 202005260448**

**Lab Sample ID: 570-29198-2**

**Date Collected: 05/26/20 11:36**

**Matrix: Water**

**Date Received: 05/27/20 11:47**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1049 mL	1000 mL	71847	05/28/20 09:49	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			71883	05/28/20 09:49	UWEZ	ECL 1
Instrument ID: NOEQUIP										

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 872940

Job ID: 570-29198-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

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# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 872940

Job ID: 570-29198-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

**Protocol References:**

1664A = EPA-821-98-002

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 872940

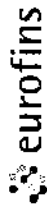
Job ID: 570-29198-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-29198-1	202005260438	Water	05/26/20 09:36	05/27/20 11:47	
570-29198-2	202005260448	Water	05/26/20 11:36	05/27/20 11:47	

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Water Analysis

Ship To:

Eurofins CalScience  
7440 Lincoln Way

Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 872940 Report Due: 06/09/2020

Sample ID: 202005260438 Client Sample ID for reference onl  
LH-INF-20200526

Sample type: Sample Event: Facility ID: Sample Point ID: Static ID: JLS

Method: EPA 1664 Prep Method: Oil and Grease by 1664(subbed) Analysis Requested:

Sample ID: 202005260448 Client Sample ID for reference onl  
MB-INF-20200526

Sample type: Sample Event: Facility ID: Sample Point ID: Static ID: JLS

Method: EPA 1664 Prep Method: Oil and Grease by 1664(subbed) Analysis Requested:

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!  
Report & Invoice must have the Folder # 872940 Job # 1000014

Report: Jackie Contreras Sub-Contracting Administrator  
EMAIL TO: us20\_subcontract@eurofins.com  
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
Phone (626) 386-1165 Fax (626) 386-1122  
Invoices to: Eurofins Eaton Analytical, LLC  
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the  
Specified State Certification # and  
Exp Date for requested tests + matrix.  
Samples from: CALIFORNIA



570-29198 Chain of Custody

Submittal Form

Da 29198

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

Relinquished by: *[Signature]* Date: 5/27/20 Time: 11:47

Received by: *[Signature]* Date: 5/27/20 Time: 11:47

Relinquished by: Date: Time:

Received by: Date: Time:

2.0 / 2-2.5cc

# Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-29198-1

**Login Number: 29198**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Ramos, Maribel**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

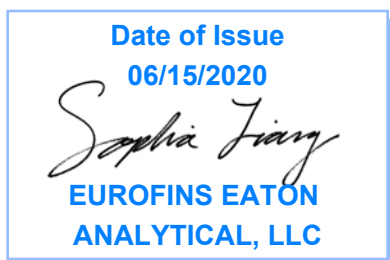


750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 874079  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report,

Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 874079  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **June 02, 2020 at 1250**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202006020423</u>	GAC-1-20200602	06/02/2020 0832
	@537.1	
<u>202006020424</u>	GAC-2-20200602	06/02/2020 0835
	Static ID: 537.1	
	@537.1	
<u>202006020425</u>	GAC-3-20200602	06/02/2020 0838
	@537.1	
<u>202006020426</u>	GAC-4-20200602	06/02/2020 0841
	@537.1	
<u>202006020427</u>	IX-1-20200602	06/02/2020 0844
	@537.1	
<u>202006020428</u>	IX-2-20200602	06/02/2020 0847
	@537.1	
<u>202006020429</u>	IX-3-20200602	06/02/2020 0850
	@537.1	
<u>202006020430</u>	IX-4-20200602	06/02/2020 0853
	@537.1	
<u>202006020431</u>	LH-INF-20200602	06/02/2020 0856
	@537.1	
	Chloride	@ANIONS48
		Sulfate
		Alkalinity in CaCO3 units
		Total Organic Carbon
<u>202006020432</u>	GAC-5-20200602	06/02/2020 1012
	@537.1	
<u>202006020433</u>	GAC-6-20200602	06/02/2020 1015
	@537.1	
<u>202006020434</u>	GAC-7-20200602	06/02/2020 1018
	@537.1	
<u>202006020435</u>	GAC-8-20200602	06/02/2020 1021

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 874079  
Project: 0250000  
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

The following samples were received from you on **June 02, 2020 at 1250**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202006020436	IX-5-20200602	06/02/2020 1024
	@537.1	
202006020437	IX-6-20200602	06/02/2020 1027
	@537.1	
202006020438	IX-7-20200602	06/02/2020 1030
	@537.1	
202006020439	IX-8-20200602	06/02/2020 1033
	@537.1	
202006020440	MB-INF-20200602	06/02/2020 1036
	@537.1	
	Chloride	@ANIONS48 Sulfate
		Alkalinity in CaCO3 units Total Organic Carbon
202006020441	FB-20200602	06/02/2020 1040
	@537.1 FB	

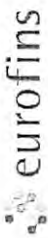
#### Test Description

- @537.1 -- EPA Method 537.1
- @537.1 FB -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0

874074

<b>FROM:</b> GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		<b>PROJECT NAME:</b> WRD Pilot		<b>PROJECT NO.:</b> 5302								
<b>LABORATORY:</b> Eurofins Eaton Analytical TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com		<b>PROJECT CONTACT:</b> Miae Jeon		<b>LAB CONTACT:</b> Sophia Liang								
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		<b>GLOBAL ID:</b>		<b>SAMPLER(S): (PRINT)</b> RDT								
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdorres@gsi-net.com; Provide EDD of sample results		<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.										
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	GAC-1-20200602	6-2-20	0832	Water	2		X					
	GAC-2-20200602		0835	Water	2		X					
	GAC-3-20200602		0838	Water	2		X					
	GAC-4-20200602		0841	Water	2		X					
	IX-1-20200602		0844	Water	2		X					
	IX-2-20200602		0847	Water	2		X					
	IX-3-20200602		0850	Water	2		X					
	IX-4-20200602		0853	Water	2		X					
	LH-INF-20200602		0856	Water	5	X	X	X	X	X		
	LH-INF-DUP			Water								
	GAC-5-20200602	6-2-20	1012	Water	2							
	GAC-6-20200602		1015	Water	2		X					
	GAC-7-20200602		1018	Water	2		X					
	GAC-8-20200602		1021	Water	2		X					
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 6-2-20		Time: 12:50						
Relinquished by: (Signature)		Received by: (Signature)		Date: 6-2-20		Time: 12:50						
Relinquished by: (Signature)		Received by: (Signature)		Date: 6-2-20		Time: 12:50						





Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 81084

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 608A (Observation = 10.5 °C) (Corr. Factor = 2 °C) (Final = 10.3 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In  FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) VOA Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

### Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: [Signature] SIGNATURE

PRINT NAME: \_\_\_\_\_

COMPANY/TITLE: Eurofins Eaton Analytical

DATE: 6/2/20

TIME: 12:52



Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 874079  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202006020431</b>	<b><u>LH-INF-20200602</u></b>			
06/04/2020 18:57	Alkalinity in CaCO3 units		200		mg/L	2.0
06/02/2020 17:18	Chloride		100	250	mg/L	2.5
06/02/2020 17:18	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
06/02/2020 17:18	Nitrate as NO3 (calc)		12	45	mg/L	2.2
06/05/2020 16:28	Perfluorobutanesulfonic acid (PFBS)		0.0061		ug/L	0.0020
06/05/2020 16:28	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
06/05/2020 16:28	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
06/05/2020 16:28	Perfluorononanoic acid (PFNA)		0.0031		ug/L	0.0020
06/05/2020 16:28	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
06/05/2020 16:28	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
06/02/2020 17:18	Sulfate		170	250	mg/L	2.5
06/02/2020 17:18	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
06/06/2020 06:23	Total Organic Carbon		0.60		mg/L	0.30
		<b>202006020440</b>	<b><u>MB-INF-20200602</u></b>			
06/04/2020 17:03	Alkalinity in CaCO3 units		170		mg/L	2.0
06/02/2020 17:05	Chloride		52	250	mg/L	2.5
06/02/2020 17:05	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
06/02/2020 17:05	Nitrate as NO3 (calc)		10	45	mg/L	2.2
06/05/2020 18:06	Perfluorobutanesulfonic acid (PFBS)		0.0091		ug/L	0.0020
06/05/2020 18:06	Perfluorodecanoic acid (PFDA)		0.0020		ug/L	0.0020
06/05/2020 18:06	Perfluoroheptanoic acid (PFHpA)		0.0031		ug/L	0.0020
06/05/2020 18:06	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
06/05/2020 18:06	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
06/05/2020 18:06	Perfluorononanoic acid (PFNA)		0.0034		ug/L	0.0020
06/05/2020 18:06	Perfluorooctanesulfonic acid (PFOS)		0.034		ug/L	0.0020
06/05/2020 18:06	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
06/02/2020 17:05	Sulfate		78	250	mg/L	2.5
06/02/2020 17:05	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
06/06/2020 06:40	Total Organic Carbon		0.76		mg/L	0.30

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20200602 (202006020423)</b>					<b>Sampled on 06/02/2020 0832</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	13C2-PFDA	120	%		1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	13C2-PFHxA	121	%		1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	13C3-HFPO-DA	118	%		1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	d3-NMeFOSAA	98	%		1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	d5-NEtFOSAA	118	%		1

**GAC-2-20200602 (202006020424)**

**Sampled on 06/02/2020 0835**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	13C2-PFDA	125	%		1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	13C2-PFHxA	122	%		1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	13C3-HFPO-DA	116	%		1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	13C4-PFOS- IS#2	89	%		1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	d3-NMeFOSAA	97	%		1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	d5-NEtFOSAA	119	%		1

**GAC-3-20200602 (202006020425)**

Sampled on 06/02/2020 0838

**EPA 537.1 - EPA Method 537.1**

06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	13C2-PFDA	114	%		1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	13C2-PFHxA	113	%		1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	110	%		1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	107	%		1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	109	%		1

**GAC-4-20200602 (202006020426)**

Sampled on 06/02/2020 0841

**EPA 537.1 - EPA Method 537.1**

06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	13C2-PFDA	111	%		1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	13C2-PFHxA	116	%		1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	112	%		1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	107	%		1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	113	%		1

**IX-1-20200602 (202006020427)**

Sampled on 06/02/2020 0844

**EPA 537.1 - EPA Method 537.1**

06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	13C2-PFDA	111	%		1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	13C2-PFHxA	110	%		1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	110	%		1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	108	%		1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	112	%		1

**IX-2-20200602 (202006020428)**

**Sampled on 06/02/2020 0847**

**EPA 537.1 - EPA Method 537.1**

06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	13C2-PFDA	117	%		1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	13C2-PFHxA	120	%		1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	116	%		1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	108	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	112	%		1

**IX-3-20200602 (202006020429)**

**Sampled on 06/02/2020 0850**

**EPA 537.1 - EPA Method 537.1**

06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	13C2-PFDA	112	%		1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	13C2-PFHxA	111	%		1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	108	%		1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	105	%		1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	111	%		1

**IX-4-20200602 (202006020430)**

**Sampled on 06/02/2020 0853**

**EPA 537.1 - EPA Method 537.1**

06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



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Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	13C2-PFDA	114	%		1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	13C2-PFHxA	113	%		1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	112	%		1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	105	%		1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	114	%		1

**LH-INF-20200602 (202006020431)**

**Sampled on 06/02/2020 0856**

**SM 5310C - Total Organic Carbon**

06/06/20 06:23	1253691	(SM 5310C)	Total Organic Carbon	0.60	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

06/02/20 17:18	1252476	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
06/02/20 17:18	1252476	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
06/02/20 17:18	1252476	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
06/02/20 17:18	1252476	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

06/02/20 17:18	1252524	(EPA 300.0)	Chloride	100	mg/L	2.5	5
06/02/20 17:18	1252524	(EPA 300.0)	Sulfate	170	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0061	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0031	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	13C2-PFDA	108	%		1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	13C2-PFHxA	109	%		1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	107	%		1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	110	%		1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**SM 2320B - Alkalinity in CaCO3 units**

06/04/20 18:57	1253020	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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**GAC-5-20200602 (202006020432)**

Sampled on 06/02/2020 1012

**EPA 537.1 - EPA Method 537.1**

06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	13C2-PFDA	105	%		1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	13C2-PFHxA	115	%		1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	114	%		1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	105	%		1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	110	%		1

**GAC-6-20200602 (202006020433)**

Sampled on 06/02/2020 1015

**EPA 537.1 - EPA Method 537.1**

06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	13C2-PFDA	111	%		1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	13C2-PFHxA	114	%		1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	116	%		1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	104	%		1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	112	%		1

**GAC-7-20200602 (202006020434)**

Sampled on 06/02/2020 1018

**EPA 537.1 - EPA Method 537.1**

06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	13C2-PFDA	110	%		1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	13C2-PFHxA	110	%		1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	110	%		1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	108	%		1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**GAC-8-20200602 (202006020435)**

Sampled on 06/02/2020 1021

**EPA 537.1 - EPA Method 537.1**

06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	13C2-PFDA	109	%		1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	13C2-PFHxA	115	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	112	%		1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	103	%		1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	111	%		1

**IX-5-20200602 (202006020436)**

**Sampled on 06/02/2020 1024**

**EPA 537.1 - EPA Method 537.1**

06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	13C2-PFDA	114	%		1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	13C2-PFHxA	111	%		1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	113	%		1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	106	%		1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	111	%		1

**IX-6-20200602 (202006020437)**

**Sampled on 06/02/2020 1027**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 537.1 - EPA Method 537.1</b>									
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	13C2-PFDA	120	%		1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	13C2-PFHxA	116	%		1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	117	%		1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	104	%		1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	117	%		1

**IX-7-20200602 (202006020438)**

Sampled on 06/02/2020 1030

<b>EPA 537.1 - EPA Method 537.1</b>									
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	13C2-PFDA	117	%		1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	13C2-PFHxA	117	%		1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	117	%		1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	106	%		1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	110	%		1

**IX-8-20200602 (202006020439)**

Sampled on 06/02/2020 1033

**EPA 537.1 - EPA Method 537.1**

06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	13C2-PFDA	118	%		1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	13C2-PFHxA	117	%		1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	118	%		1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	104	%		1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	113	%		1

**MB-INF-20200602 (202006020440)**

Sampled on 06/02/2020 1036

**SM 5310C - Total Organic Carbon**

06/06/20 06:40	1253691	(SM 5310C)	Total Organic Carbon	0.76	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

06/02/20 17:05	1252476	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
06/02/20 17:05	1252476	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5
06/02/20 17:05	1252476	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
06/02/20 17:05	1252476	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

06/02/20 17:05	1252524	(EPA 300.0)	Chloride	52	mg/L	2.5	5
06/02/20 17:05	1252524	(EPA 300.0)	Sulfate	78	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0091	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0020	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0031	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0034	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.034	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	13C2-PFDA	111	%		1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	13C2-PFHxA	104	%		1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	99	%		1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	117	%		1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	101	%		1

**SM 2320B - Alkalinity in CaCO3 units**

06/04/20 17:03		1253020	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
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**FB-20200602 (202006020441)**

Sampled on 06/02/2020 1040

**EPA 537.1 - EPA Method 537.1**

06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	13C2-PFDA	94	%		1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	13C2-PFHxA	102	%		1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	13C3-HFPO-DA	92	%		1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	d3-NMeFOSAA	109	%		1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	d5-NEtFOSAA	96	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Water Replenishment District

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**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1252476**

202006020431                      LH-INF-20200602  
 202006020440                      MB-INF-20200602

**Analysis Date: 06/02/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1252524**

202006020431                      LH-INF-20200602  
 202006020440                      MB-INF-20200602

**Analysis Date: 06/02/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Alkalinity in CaCO3 units**

**Analytical Batch: 1253020**

202006020431                      LH-INF-20200602  
 202006020440                      MB-INF-20200602

**Analysis Date: 06/04/2020**

Analyzed by: ZB2Z  
 Analyzed by: ZB2Z

**EPA Method 537.1**

**Prep Batch: 1252582 Analytical Batch: 1253213**

202006020423                      GAC-1-20200602  
 202006020424                      GAC-2-20200602

**Analysis Date: 06/04/2020**

Analyzed by: KAM  
 Analyzed by: KAM

**EPA Method 537.1**

**Prep Batch: 1252652 Analytical Batch: 1253658**

202006020425                      GAC-3-20200602  
 202006020426                      GAC-4-20200602  
 202006020427                      IX-1-20200602  
 202006020428                      IX-2-20200602  
 202006020429                      IX-3-20200602  
 202006020430                      IX-4-20200602  
 202006020431                      LH-INF-20200602  
 202006020432                      GAC-5-20200602  
 202006020433                      GAC-6-20200602  
 202006020434                      GAC-7-20200602  
 202006020435                      GAC-8-20200602  
 202006020436                      IX-5-20200602  
 202006020437                      IX-6-20200602  
 202006020438                      IX-7-20200602  
 202006020439                      IX-8-20200602  
 202006020440                      MB-INF-20200602

**Analysis Date: 06/05/2020**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
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 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM

**Total Organic Carbon**

**Analytical Batch: 1253691**

202006020431                      LH-INF-20200602  
 202006020440                      MB-INF-20200602

**Analysis Date: 06/06/2020**

Analyzed by: ZS6I  
 Analyzed by: ZS6I

**EPA Method 537.1**

**Prep Batch: 1254164 Analytical Batch: 1254828**

202006020441                      FB-20200602

**Analysis Date: 06/11/2020**

Analyzed by: KAM

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1252476</b>					<b>Analysis Date: 06/02/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.56	mg/L	102	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.53	mg/L	101	(90-110)	20	1.2
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0502	mg/L	100	(50-150)		
MS_202006020197	Nitrate as Nitrogen by IC	5.3	1.3	6.59	mg/L	105	(80-120)		
MS_202006020431	Nitrate as Nitrogen by IC	2.8	6.5	9.44	mg/L	107	(80-120)		
MSD_202006020197	Nitrate as Nitrogen by IC	5.3	1.3	6.59	mg/L	105	(80-120)	20	0.026
MSD_202006020431	Nitrate as Nitrogen by IC	2.8	6.5	9.47	mg/L	107	(80-120)	20	0.36
LCS1	Nitrite Nitrogen by IC		1	0.987	mg/L	99	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.982	mg/L	98	(90-110)	20	0.51
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0405	mg/L	81	(50-150)		
MS_202006020197	Nitrite Nitrogen by IC	ND	0.5	0.506	mg/L	101	(80-120)		
MS_202006020431	Nitrite Nitrogen by IC	ND	2.5	2.43	mg/L	97	(80-120)		
MSD_202006020197	Nitrite Nitrogen by IC	ND	0.5	0.506	mg/L	101	(80-120)	20	0.020
MSD_202006020431	Nitrite Nitrogen by IC	ND	2.5	2.44	mg/L	98	(80-120)	20	0.52
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1252524</b>					<b>Analysis Date: 06/02/2020</b>				
LCS1	Chloride		25	26.0	mg/L	104	(90-110)		
LCS2	Chloride		25	25.7	mg/L	103	(90-110)	20	1.2
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.440	mg/L	88	(50-150)		
MS_202006020431	Chloride	100	65	173	mg/L	110	(80-120)		
MSD_202006020431	Chloride	100	65	174	mg/L	110	(80-120)	20	0.32
LCS1	Sulfate		50	51.3	mg/L	103	(90-110)		
LCS2	Sulfate		50	50.8	mg/L	102	(90-110)	20	0.98
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.958	mg/L	96	(50-150)		
MRL_LW	Sulfate		0.25	0.242	mg/L	97	(50-150)		
MS_202006020431	Sulfate	170	125	306	mg/L	109	(80-120)		
MSD_202006020431	Sulfate	170	125	307	mg/L	109	(80-120)	20	0.33
<b>Alkalinity in CaCO3 units by SM 2320B</b>									
<b>Analytical Batch: 1253020</b>					<b>Analysis Date: 06/04/2020</b>				
LCS1	Alkalinity in CaCO3 units		100	99.3	mg/L	99	(90-110)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Alkalinity in CaCO3 units		100	99.6	mg/L	100	(90-110)	20	0.30
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.00	mg/L	100	(50-150)		
MS_202006030195	Alkalinity in CaCO3 units	120	100	165	mg/L	<b>44</b>	(80-120)		
MS_202006030197	Alkalinity in CaCO3 units	71	100	176	mg/L	105	(80-120)		
MSD_202006030195	Alkalinity in CaCO3 units	120	100	160	mg/L	<b>39</b>	(80-120)	20	3.0
MSD_202006030197	Alkalinity in CaCO3 units	71	100	175	mg/L	104	(80-120)	20	0.45

EPA Method 537.1 by EPA 537.1

Prep Batch: 1252582 Analytical Batch: 1253213

Analysis Date: 06/04/2020

DUP_202006020305	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0236	ug/L	100	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0259	ug/L	110	(70-130)	30	9.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00200	ug/L	106	(50-150)		
MS1_202006020303	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0244	ug/L	104	(70-130)		
DUP_202006020305	13C2-PFDA (S)			116	%	116	(70-130)		
LCS1	13C2-PFDA (S)		100	118	%	118	(70-130)		
LCS2	13C2-PFDA (S)		100	116	%	116	(70-130)		
MBLK	13C2-PFDA (S)			110	%	110	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	108	%	109	(70-130)		
MS1_202006020303	13C2-PFDA (S)		100	109	%	109	(70-130)		
DUP_202006020305	13C2-PFHxA (S)			122	%	122	(70-130)		
LCS1	13C2-PFHxA (S)		100	123	%	123	(70-130)		
LCS2	13C2-PFHxA (S)		100	116	%	116	(70-130)		
MBLK	13C2-PFHxA (S)			117	%	117	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	97.7	%	98	(70-130)		
MS1_202006020303	13C2-PFHxA (S)		100	119	%	119	(70-130)		
DUP_202006020305	13C2-PFOA- IS#1 (I)			91.9	%	92	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	90.5	%	90	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	90.8	%	91	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			93.9	%	94	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	95.4	%	95	(50-150)		
MS1_202006020303	13C2-PFOA- IS#1 (I)		100	91.3	%	91	(50-150)		
DUP_202006020305	13C3-HFPO-DA (S)			117	%	117	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	118	%	118	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	111	%	111	(70-130)		
MBLK	13C3-HFPO-DA (S)			113	%	113	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C3-HFPO-DA (S)		100	84.7	%	85	(70-130)		
MS1_202006020303	13C3-HFPO-DA (S)		100	115	%	115	(70-130)		
DUP_202006020305	13C4-PFOS- IS#2 (I)			86.1	%	86	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	88.3	%	88	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	86.6	%	87	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			88.0	%	88	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	88.0	%	88	(50-150)		
MS1_202006020303	13C4-PFOS- IS#2 (I)		100	87.5	%	87	(50-150)		
DUP_202006020305	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0276	ug/L	117	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0268	ug/L	113	(70-130)	30	2.9
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00191	ug/L	101	(50-150)		
MS1_202006020303	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0271	ug/L	115	(70-130)		
DUP_202006020305	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0251	ug/L	108	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0256	ug/L	110	(70-130)	30	2.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00196	ug/L	106	(50-150)		
MS1_202006020303	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0240	ug/L	103	(70-130)		
DUP_202006020305	d3-NMeFOSAA (I)			88.1	%	88	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	85.7	%	86	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	86.3	%	86	(50-150)		
MBLK	d3-NMeFOSAA (I)			84.5	%	84	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	88.8	%	89	(50-150)		
MS1_202006020303	d3-NMeFOSAA (I)		100	86.6	%	87	(50-150)		
DUP_202006020305	d5-NEtFOSAA (S)			113	%	113	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	113	%	113	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MBLK	d5-NEtFOSAA (S)			117	%	117	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
MS1_202006020303	d5-NEtFOSAA (S)		100	108	%	108	(70-130)		
DUP_202006020305	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0265	ug/L	106	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0273	ug/L	109	(70-130)	30	3.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00161	ug/L	81	(50-150)		
MS1_202006020303	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0270	ug/L	108	(70-130)		

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202006020305	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0269	ug/L	108	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0276	ug/L	111	(70-130)	30	2.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00208	ug/L	104	(50-150)		
MS1_202006020303	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0258	ug/L	103	(70-130)		
DUP_202006020305	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0268	ug/L	107	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0271	ug/L	108	(70-130)	30	1.1
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00218	ug/L	109	(50-150)		
MS1_202006020303	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0254	ug/L	102	(70-130)		
DUP_202006020305	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0256	ug/L	115	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0258	ug/L	116	(70-130)	30	0.78
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00196	ug/L	111	(50-150)		
MS1_202006020303	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0252	ug/L	113	(70-130)		
DUP_202006020305	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0274	ug/L	110	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0281	ug/L	112	(70-130)	30	2.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00219	ug/L	110	(50-150)		
MS1_202006020303	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0268	ug/L	107	(70-130)		
DUP_202006020305	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0252	ug/L	101	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0264	ug/L	106	(70-130)	30	4.7
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00203	ug/L	101	(50-150)		
MS1_202006020303	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0256	ug/L	102	(70-130)		
DUP_202006020305	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0301	ug/L	120	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0303	ug/L	121	(70-130)	30	0.66
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00219	ug/L	110	(50-150)		
MS1_202006020303	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0304	ug/L	121	(70-130)		
DUP_202006020305	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0273	ug/L	120	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0275	ug/L	121	(70-130)	30	0.73
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00202	ug/L	111	(50-150)		
MS1_202006020303	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0274	ug/L	118	(70-130)		
DUP_202006020305	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0297	ug/L	119	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0287	ug/L	115	(70-130)	30	3.4
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00196	ug/L	98	(50-150)		
MS1_202006020303	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0285	ug/L	113	(70-130)		
DUP_202006020305	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0276	ug/L	111	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0292	ug/L	117	(70-130)	30	5.3
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00222	ug/L	111	(50-150)		
MS1_202006020303	Perfluorononanoic acid (PFNA)	ND	0.025	0.0278	ug/L	111	(70-130)		
DUP_202006020305	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0262	ug/L	113	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0265	ug/L	115	(70-130)	30	1.1
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00202	ug/L	109	(50-150)		
MS1_202006020303	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0250	ug/L	107	(70-130)		
DUP_202006020305	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0293	ug/L	117	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0289	ug/L	116	(70-130)	30	1.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00242	ug/L	121	(50-150)		
MS1_202006020303	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0293	ug/L	116	(70-130)		
DUP_202006020305	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0284	ug/L	114	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0298	ug/L	119	(70-130)	30	4.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00230	ug/L	115	(50-150)		
MS1_202006020303	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0284	ug/L	113	(70-130)		
DUP_202006020305	Perfluorotridecanoic acid (PFTTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTTrDA)		0.025	0.0255	ug/L	102	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTTrDA)		0.025	0.0269	ug/L	108	(70-130)	30	5.3
MBLK	Perfluorotridecanoic acid (PFTTrDA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00203	ug/L	101	(50-150)		
MS1_202006020303	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0258	ug/L	103	(70-130)		
DUP_202006020305	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0258	ug/L	103	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0260	ug/L	104	(70-130)	30	1.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00198	ug/L	99	(50-150)		
MS1_202006020303	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0260	ug/L	104	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1252652 Analytical Batch: 1253658

Analysis Date: 06/05/2020

DUP_202006020551	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0489	ug/L	104	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0488	ug/L	104	(70-130)	30	0.21
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00189	ug/L	101	(50-150)		
MS_202006020425	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00182	ug/L	97	(50-150)		
DUP_202006020551	13C2-PFDA (S)			120	%	120	(70-130)		
LCS3	13C2-PFDA (S)		100	117	%	117	(70-130)		
LCS4	13C2-PFDA (S)		100	112	%	112	(70-130)		
MBLK	13C2-PFDA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	109	%	109	(70-130)		
MS_202006020425	13C2-PFDA (S)		100	116	%	116	(70-130)		
DUP_202006020551	13C2-PFHxA (S)			122	%	122	(70-130)		
LCS3	13C2-PFHxA (S)		100	117	%	117	(70-130)		
LCS4	13C2-PFHxA (S)		100	117	%	117	(70-130)		
MBLK	13C2-PFHxA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	112	%	112	(70-130)		
MS_202006020425	13C2-PFHxA (S)		100	118	%	118	(70-130)		
DUP_202006020551	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.0	%	98	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	98.1	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			105	%	105	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MS_202006020425	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
DUP_202006020551	13C3-HFPO-DA (S)			119	%	119	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	117	%	117	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	119	%	119	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 874079  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C3-HFPO-DA (S)			105	%	105	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
MS_202006020425	13C3-HFPO-DA (S)		100	114	%	114	(70-130)		
DUP_202006020551	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.4	%	99	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	100	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			103	%	103	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	99.2	%	99	(50-150)		
MS_202006020425	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
DUP_202006020551	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0504	ug/L	104	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0508	ug/L	105	(70-130)	30	0.59
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00188	ug/L	99	(50-150)		
MS_202006020425	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00196	ug/L	104	(50-150)		
DUP_202006020551	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0497	ug/L	107	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0485	ug/L	104	(70-130)	30	2.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00191	ug/L	103	(50-150)		
MS_202006020425	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00183	ug/L	99	(50-150)		
DUP_202006020551	d3-NMeFOSAA (I)			107	%	107	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MBLK	d3-NMeFOSAA (I)			104	%	104	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MS_202006020425	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
DUP_202006020551	d5-NEtFOSAA (S)			113	%	113	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
MBLK	d5-NEtFOSAA (S)			105	%	105	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
MS_202006020425	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
DUP_202006020551	Hexafluoropropylene oxide dimer acid (HFPO-DA)			ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0516	ug/L	103	(70-130)	30	3.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00192	ug/L	96	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202006020425	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00192	ug/L	96	(50-150)		
DUP_202006020551	N-ethyl Perfluorooctanesulfonamidoacetic acid			ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0511	ug/L	102	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0495	ug/L	99	(70-130)	30	3.2
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00198	ug/L	99	(50-150)		
MS_202006020425	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00202	ug/L	101	(50-150)		
DUP_202006020551	N-methyl Perfluorooctanesulfonamidoacetic acid			ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0525	ug/L	105	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0507	ug/L	101	(70-130)	30	3.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	105	(50-150)		
MS_202006020425	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00195	ug/L	97	(50-150)		
DUP_202006020551	Perfluorobutanesulfonic acid (PFBS)			ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0480	ug/L	109	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0479	ug/L	108	(70-130)	30	0.21
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00184	ug/L	104	(50-150)		
MS_202006020425	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00188	ug/L	106	(50-150)		
DUP_202006020551	Perfluorodecanoic acid (PFDA)			ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0540	ug/L	108	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0538	ug/L	108	(70-130)	30	0.37
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00198	ug/L	99	(50-150)		
MS_202006020425	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00210	ug/L	105	(50-150)		
DUP_202006020551	Perfluorododecanoic acid (PFDoA)			ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0541	ug/L	108	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0528	ug/L	106	(70-130)	30	2.4
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00202	ug/L	101	(50-150)		
MS_202006020425	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00207	ug/L	103	(50-150)		
DUP_202006020551	Perfluoroheptanoic acid (PFHpA)			ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0558	ug/L	112	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0547	ug/L	109	(70-130)	30	2.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00209	ug/L	104	(50-150)		
MS_202006020425	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00217	ug/L	108	(50-150)		
DUP_202006020551	Perfluorohexanesulfonic acid (PFHxS)			ND	ug/L		(0-30)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0491	ug/L	108	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0498	ug/L	109	(70-130)	30	1.4
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00191	ug/L	105	(50-150)		
MS_202006020425	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00194	ug/L	107	(50-150)		
DUP_202006020551	Perfluorohexanoic acid (PFHxA)			ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0558	ug/L	112	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0543	ug/L	109	(70-130)	30	2.7
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00205	ug/L	103	(50-150)		
MS_202006020425	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00226	ug/L	109	(50-150)		
DUP_202006020551	Perfluorononanoic acid (PFNA)			ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0547	ug/L	109	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0536	ug/L	107	(70-130)	30	2.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00208	ug/L	104	(50-150)		
MS_202006020425	Perfluorononanoic acid (PFNA)	ND	0.002	0.00203	ug/L	102	(50-150)		
DUP_202006020551	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0494	ug/L	107	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0503	ug/L	109	(70-130)	30	1.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00183	ug/L	99	(50-150)		
MS_202006020425	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00201	ug/L	104	(50-150)		
DUP_202006020551	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0552	ug/L	111	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0550	ug/L	110	(70-130)	30	0.54
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00216	ug/L	108	(50-150)		
MS_202006020425	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00221	ug/L	104	(50-150)		
DUP_202006020551	Perfluorotetradecanoic acid (PFTA)			ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0592	ug/L	118	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0570	ug/L	114	(70-130)	30	3.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202006020425	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00231	ug/L	104	(50-150)		
DUP_202006020551	Perfluorotridecanoic acid (PFTTrDA)			ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTTrDA)		0.05	0.0539	ug/L	108	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTTrDA)		0.05	0.0539	ug/L	108	(70-130)	30	0.0

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Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00195	ug/L	98	(50-150)		
MS_202006020425	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00202	ug/L	101	(50-150)		
DUP_202006020551	Perfluoroundecanoic acid (PFUnA)			ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0539	ug/L	108	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0524	ug/L	105	(70-130)	30	2.8
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00200	ug/L	100	(50-150)		
MS_202006020425	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00205	ug/L	103	(50-150)		

Total Organic Carbon by SM 5310C

Analytical Batch: 1253691

Analysis Date: 06/06/2020

LCS1	Total Organic Carbon		5	4.95	mg/L	99	(90-110)		
LCS2	Total Organic Carbon		5	5.00	mg/L	100	(90-110)	20	1.0
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.246	mg/L	123	(50-150)		
MS_202005300016	Total Organic Carbon	4.8	4	8.80	mg/L	93	(80-120)		
MSD_202005300016	Total Organic Carbon	4.8	4	8.83	mg/L	94	(80-120)	20	0.34

EPA Method 537.1 by EPA 537.1

Prep Batch: 1254164 Analytical Batch: 1254828

Analysis Date: 06/11/2020

DUP_202006090426	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0498	ug/L	106	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0503	ug/L	107	(70-130)	30	1
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00219	ug/L	117	(50-150)		
MS2_202006090425	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0524	ug/L	111	(70-130)		
DUP_202006090426	13C2-PFDA (S)			97.5	%	98	(70-130)		
LCS3	13C2-PFDA (S)		100	95.3	%	95	(70-130)		
LCS4	13C2-PFDA (S)		100	97.1	%	97	(70-130)		
MBLK	13C2-PFDA (S)			95.7	%	96	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	101	%	101	(70-130)		
MS2_202006090425	13C2-PFDA (S)		100	96.9	%	97	(70-130)		
DUP_202006090426	13C2-PFHxA (S)			82.8	%	83	(70-130)		
LCS3	13C2-PFHxA (S)		100	99.5	%	99	(70-130)		
LCS4	13C2-PFHxA (S)		100	99.4	%	99	(70-130)		
MBLK	13C2-PFHxA (S)			98.5	%	98	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	97.8	%	98	(70-130)		
MS2_202006090425	13C2-PFHxA (S)		100	100	%	100	(70-130)		

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Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202006090426	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			105	%	105	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS2_202006090425	13C2-PFOA- IS#1 (I)		100	102	%	103	(50-150)		
DUP_202006090426	13C3-HFPO-DA (S)			73.9	%	74	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	92.2	%	92	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	90.4	%	90	(70-130)		
MBLK	13C3-HFPO-DA (S)			89.4	%	89	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	85.3	%	85	(70-130)		
MS2_202006090425	13C3-HFPO-DA (S)		100	92.9	%	93	(70-130)		
DUP_202006090426	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.5	%	99	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			103	%	103	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS2_202006090425	13C4-PFOS- IS#2 (I)		100	99.7	%	100	(50-150)		
DUP_202006090426	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0473	ug/L	98	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0482	ug/L	99	(70-130)	30	1.9
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00210	ug/L	111	(50-150)		
MS2_202006090425	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0494	ug/L	102	(70-130)		
DUP_202006090426	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0491	ug/L	105	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0485	ug/L	104	(70-130)	30	1.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00203	ug/L	109	(50-150)		
MS2_202006090425	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0497	ug/L	107	(70-130)		
DUP_202006090426	d3-NMeFOSAA (I)			113	%	113	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MBLK	d3-NMeFOSAA (I)			104	%	105	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
MS2_202006090425	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
DUP_202006090426	d5-NEtFOSAA (S)			95.4	%	95	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	92.6	%	93	(70-130)		

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Report: 874079  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	d5-NEtFOSAA (S)		100	95.5	%	95	(70-130)		
MBLK	d5-NEtFOSAA (S)			91.1	%	91	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	95.6	%	96	(70-130)		
MS2_202006090425	d5-NEtFOSAA (S)		100	91.0	%	91	(70-130)		
DUP_202006090426	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0465	ug/L	93	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0483	ug/L	97	(70-130)	30	3.8
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00193	ug/L	97	(50-150)		
MS2_202006090425	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0483	ug/L	97	(70-130)		
DUP_202006090426	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0486	ug/L	97	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0519	ug/L	104	(70-130)	30	6.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	107	(50-150)		
MS2_202006090425	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0490	ug/L	98	(70-130)		
DUP_202006090426	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0504	ug/L	101	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0514	ug/L	103	(70-130)	30	2.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	105	(50-150)		
MS2_202006090425	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0488	ug/L	98	(70-130)		
DUP_202006090426	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0476	ug/L	107	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0471	ug/L	106	(70-130)	30	1.1
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00200	ug/L	113	(50-150)		
MS2_202006090425	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0475	ug/L	107	(70-130)		
DUP_202006090426	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0509	ug/L	102	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0504	ug/L	101	(70-130)	30	0.99
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00225	ug/L	113	(50-150)		
MS2_202006090425	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0544	ug/L	109	(70-130)		
DUP_202006090426	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0500	ug/L	100	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0506	ug/L	101	(70-130)	30	1.2
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.



Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00214	ug/L	107	(50-150)		
MS2_202006090425	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0507	ug/L	101	(70-130)		
DUP_202006090426	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0518	ug/L	104	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0533	ug/L	107	(70-130)	30	2.7
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00246	ug/L	123	(50-150)		
MS2_202006090425	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0541	ug/L	108	(70-130)		
DUP_202006090426	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0494	ug/L	108	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0499	ug/L	110	(70-130)	30	0.81
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00203	ug/L	111	(50-150)		
MS2_202006090425	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0492	ug/L	108	(70-130)		
DUP_202006090426	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0514	ug/L	103	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0528	ug/L	106	(70-130)	30	2.7
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00227	ug/L	113	(50-150)		
MS2_202006090425	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0531	ug/L	106	(70-130)		
DUP_202006090426	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0512	ug/L	102	(70-130)	30	0.20
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00232	ug/L	116	(50-150)		
MS2_202006090425	Perfluorononanoic acid (PFNA)	ND	0.05	0.0517	ug/L	103	(70-130)		
DUP_202006090426	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0484	ug/L	105	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0491	ug/L	106	(70-130)	30	1.4
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00208	ug/L	112	(50-150)		
MS2_202006090425	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0482	ug/L	104	(70-130)		
DUP_202006090426	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0526	ug/L	105	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0533	ug/L	107	(70-130)	30	1.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00252	ug/L	126	(50-150)		
MS2_202006090425	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0530	ug/L	106	(70-130)		

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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 1 800 566 LABS (1 800 566 5227)

Report: 874079  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202006090426	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0522	ug/L	104	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0536	ug/L	107	(70-130)	30	2.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00262	ug/L	131	(50-150)		
MS2_202006090425	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0590	ug/L	118	(70-130)		
DUP_202006090426	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0487	ug/L	97	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0501	ug/L	100	(70-130)	30	2.8
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00216	ug/L	108	(50-150)		
MS2_202006090425	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0510	ug/L	102	(70-130)		
DUP_202006090426	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0505	ug/L	101	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0509	ug/L	102	(70-130)	30	0.79
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00218	ug/L	109	(50-150)		
MS2_202006090425	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0510	ug/L	102	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 06/12/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 06/12/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 06/12/2020

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_

Project: \_\_\_\_\_  
 Phone #: \_\_\_\_\_  
 Date Received: \_\_\_\_\_  
 Sampled By: \_\_\_\_\_  
 Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
 P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)\*

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required

Approved by

Date of Issue: 06/12/2020

Quant Report - Page 1 of 1

Tel Fax

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)



## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 875389  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.



## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 875389  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:  
 PO #: 5302

The following samples were received from you on **June 09, 2020 at 1448**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202006090542</u>	GAC-1-20200609 Static ID: 537.1 @537.1	06/09/2020 0952
<u>202006090558</u>	GAC-2-20200609 @537.1	06/09/2020 0955
<u>202006090559</u>	GAC-3-20200609 @537.1	06/09/2020 0958
<u>202006090560</u>	GAC-4-20200609 @537.1	06/09/2020 1001
<u>202006090561</u>	IX-1-20200609 @537.1	06/09/2020 1004
<u>202006090562</u>	IX-2-20200609 @537.1	06/09/2020 1007
<u>202006090563</u>	IX-3-20200609 @537.1	06/09/2020 1010
<u>202006090564</u>	IX-4-20200609 @537.1	06/09/2020 1013
<u>202006090565</u>	LH-INF-20200609 @537.1 Chloride	06/09/2020 1016
	@ANIONS48 Sulfate	Alkalinity in CaCO3 units Total Organic Carbon
<u>202006090566</u>	LH-INF-DUP-20200609 @537.1	06/09/2020 1017
<u>202006090567</u>	GAC-5-20200609 @537.1	06/09/2020 1132
<u>202006090568</u>	GAC-6-20200609 @537.1	06/09/2020 1135
<u>202006090569</u>	GAC-7-20200609	06/09/2020 1138

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 875389  
Project: 0250000  
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:  
PO #: 5302

The following samples were received from you on **June 09, 2020 at 1448**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202006090570	GAC-8-20200609	06/09/2020 1141
	@537.1	
202006090571	IX-5-20200609	06/09/2020 1144
	@537.1	
202006090572	IX-6-20200609	06/09/2020 1147
	@537.1	
202006090573	IX-7-20200609	06/09/2020 1150
	@537.1	
202006090574	IX-8-20200609	06/09/2020 1153
	@537.1	
202006090575	MB-INF-20200609	06/09/2020 1156
	@537.1	
	Chloride	@ANIONS48
		Sulfate
		Alkalinity in CaCO3 units
		Total Organic Carbon
202006090576	FB-20200609	06/09/2020 1200
	@537.1 FB	

#### Test Description

- @537.1 -- EPA Method 537.1
- @537.1 FB -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0

675389

<b>FROM:</b> GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		<b>PROJECT NAME:</b> WRD Pilot										
<b>TEL:</b> (949) 679-1070		<b>PROJECT CONTACT:</b> Miae Jeon										
<b>E-MAIL:</b> mjeon@gsi-net.com		<b>GLOBAL ID:</b>										
<b>LABORATORY:</b> Eurofins Eaton Analytical		<b>LAB CONTACT:</b> Sophia Liang										
<b>TURNAROUND TIME:</b> <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		<b>SAMPLER(S): (PRINT)</b> RDT										
<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.												
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	GAC-1 - 20200609	6-9	0952	Water	2		X					
	GAC-2 - 20200609		0955	Water	2		X					
	GAC-3 - 20200609		0958	Water	2		X					
	GAC-4 - 20200609		1001	Water	2		X					
	IX-1 - 20200609		1004	Water	2		X					
	IX-2 - 20200609		1007	Water	2		X					
	IX-3 - 20200609		1010	Water	2		X					
	IX-4 - 20200609		1013	Water	2		X					
	LH-INF - 20200609		1016	Water	5	X			X			
	LH-INF-DUP - 20200609		1017	Water	2	X			X			
	GAC-5 - 20200609		1132	Water	2		X					
	GAC-6 - 20200609		1135	Water	2		X					
	GAC-7 - 20200609		1138	Water	2		X					
	GAC-8 - 20200609		1141	Water	2		X					
Relinquished by: (Signature) <i>DB</i>		Received by: (Signature) <i>Quinn Brooks</i>		Date: 6-9-2020		Time: 1417						
Relinquished by: (Signature)		Received by: (Signature)		Date: 6.9.20		Time: 1418						
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:						

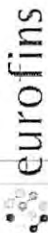


FROM:		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302
GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang
TEL: (949) 679-1070		E-MAIL: mjeon@gsi-net.com		SAMPLER(S): (PRINT) <b>RDT</b>
LABORATORY: Eurofins Eaton Analytical		GLOBAL ID:		

**REQUESTED ANALYSES**  
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Preservation			PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	Field Filtered
		DATE	TIME			Unpreserved	Preserved	Field Filtered					
	IX-5 - 20200609	6-9	1144	Water	2		2	X					
	IX-6 - 20200609		1147	Water	2		2	X					
	IX-7 - 20200609	↓	1150	Water	2		2	X					
	IX-8 - 20200609	↓	1153	Water	2		2	X					
	MB-INF - 20200609	↓	1156	Water	5	2	3	X	X				
	<del>MB-INF-DUP</del>			Water					X				
	FB - 20200609	6-9	1200	Water	1		1		X				

Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date: <u>6-9-2020</u>	Time: <u>1447</u>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date: <u>6-9-20</u>	Time: <u>1448</u>
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:



Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 607384

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 616A (Observation = 8.5 °C) (Corr. Factor = -0.2 °C) (Final = 8.3 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Condition of ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results \_\_\_\_\_

7) VOA Headspace:  No Samples with Headspace:  Samples with Headspace (see below):   
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors):

RECEIVED BY:	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
<u>Chris Booker</u>	<u>Chris Booker</u>	Chris Booker	Eurofins Eaton Analytical	6.9.20	1448

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 875389  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202006090565      <u>LH-INF-20200609</u></b>						
06/10/2020 16:47	Alkalinity in CaCO3 units		200		mg/L	2.0
06/09/2020 20:38	Chloride		110	250	mg/L	2.5
06/09/2020 20:38	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
06/09/2020 20:38	Nitrate as NO3 (calc)		12	45	mg/L	2.2
06/13/2020 01:51	Perfluorobutanesulfonic acid (PFBS)		0.0053		ug/L	0.0020
06/13/2020 01:51	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
06/13/2020 01:51	Perfluorohexanoic acid (PFHxA)		0.0026		ug/L	0.0020
06/13/2020 01:51	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
06/13/2020 01:51	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
06/13/2020 01:51	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
06/09/2020 20:38	Sulfate		180	250	mg/L	2.5
06/09/2020 20:38	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
06/13/2020 00:03	Total Organic Carbon		0.64		mg/L	0.30
<b>202006090566      <u>LH-INF-DUP-20200609</u></b>						
06/13/2020 02:01	Perfluorobutanesulfonic acid (PFBS)		0.0053		ug/L	0.0020
06/13/2020 02:01	Perfluorohexanesulfonic acid (PFHxS)		0.0060		ug/L	0.0020
06/13/2020 02:01	Perfluorohexanoic acid (PFHxA)		0.0025		ug/L	0.0020
06/13/2020 02:01	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
06/13/2020 02:01	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
06/13/2020 02:01	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
<b>202006090575      <u>MB-INF-20200609</u></b>						
06/10/2020 16:40	Alkalinity in CaCO3 units		170		mg/L	2.0
06/09/2020 20:25	Chloride		52	250	mg/L	2.5
06/09/2020 20:25	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
06/09/2020 20:25	Nitrate as NO3 (calc)		10	45	mg/L	2.2
06/13/2020 03:37	Perfluorobutanesulfonic acid (PFBS)		0.0076		ug/L	0.0020
06/13/2020 03:37	Perfluoroheptanoic acid (PFHpA)		0.0027		ug/L	0.0020
06/13/2020 03:37	Perfluorohexanesulfonic acid (PFHxS)		0.0060		ug/L	0.0020
06/13/2020 03:37	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
06/13/2020 03:37	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
06/13/2020 03:37	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
06/13/2020 03:37	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
06/09/2020 20:25	Sulfate		78	250	mg/L	2.5
06/09/2020 20:25	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
06/13/2020 00:19	Total Organic Carbon		0.80		mg/L	0.30

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20200609 (202006090542)</b>					<b>Sampled on 06/09/2020 0952</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	13C2-PFDA	98	%		1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	13C2-PFHxA	97	%		1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	82	%		1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	116	%		1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	100	%		1

<b>GAC-2-20200609 (202006090558)</b>					<b>Sampled on 06/09/2020 0955</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	13C2-PFDA	86	%		1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	13C2-PFHxA	85	%		1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	124	%		1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	79	%		1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	119	%		1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**GAC-3-20200609 (202006090559)**

**Sampled on 06/09/2020 0958**

**EPA 537.1 - EPA Method 537.1**

06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	13C2-PFDA	87	%		1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	13C2-PFHxA	86	%		1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	79	%		1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	117	%		1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	d5-NeFOSAA	99	%		1

**GAC-4-20200609 (202006090560)**

Sampled on 06/09/2020 1001

**EPA 537.1 - EPA Method 537.1**

06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	13C2-PFDA	90	%		1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	13C2-PFHxA	93	%		1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	82	%		1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	115	%		1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**IX-1-20200609 (202006090561)**

Sampled on 06/09/2020 1004

**EPA 537.1 - EPA Method 537.1**

06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	13C2-PFDA	90	%		1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	13C2-PFHxA	89	%		1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	84	%		1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	117	%		1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	101	%		1

**IX-2-20200609 (202006090562)**

**Sampled on 06/09/2020 1007**

**EPA 537.1 - EPA Method 537.1**

06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	13C2-PFDA	94	%		1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	13C2-PFHxA	92	%		1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	83	%		1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	112	%		1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	117	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	103	%		1
<b>IX-3-20200609 (202006090563)</b>					<b>Sampled on 06/09/2020 1010</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	13C2-PFDA	91	%		1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	13C2-PFHxA	92	%		1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	86	%		1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	118	%		1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**IX-4-20200609 (202006090564)**

**Sampled on 06/09/2020 1013**

**EPA 537.1 - EPA Method 537.1**

06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	13C2-PFDA	100	%		1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	13C2-PFHxA	92	%		1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	85	%		1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	114	%		1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	120	%		1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**LH-INF-20200609 (202006090565)**

Sampled on 06/09/2020 1016

**SM 5310C - Total Organic Carbon**

06/13/20 00:03	1254850	(SM 5310C)	Total Organic Carbon	0.64	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

06/09/20 20:38	1254043	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
06/09/20 20:38	1254043	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
06/09/20 20:38	1254043	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
06/09/20 20:38	1254043	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

06/09/20 20:38	1254042	(EPA 300.0)	Chloride	110	mg/L	2.5	5
06/09/20 20:38	1254042	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0053	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0026	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	13C2-PFDA	90	%		1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	13C2-PFHxA	82	%		1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	134	%		1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	76	%		1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	112	%		1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	124	%		1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**SM 2320B - Alkalinity in CaCO3 units**

06/10/20 16:47	1254250	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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**LH-INF-DUP-20200609 (202006090566)**

**Sampled on 06/09/2020 1017**

**EPA 537.1 - EPA Method 537.1**

06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0053	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0060	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0025	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	13C2-PFDA	92	%		1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	13C2-PFHxA	76	%		1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	138	%		1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	73	%		1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	123	%		1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**GAC-5-20200609 (202006090567)**

Sampled on 06/09/2020 1132

**EPA 537.1 - EPA Method 537.1**

06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	13C2-PFDA	84	%		1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	13C2-PFHxA	85	%		1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	130	%		1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	82	%		1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	110	%		1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	119	%		1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**GAC-6-20200609 (202006090568)**

Sampled on 06/09/2020 1135

**EPA 537.1 - EPA Method 537.1**

06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	13C2-PFDA	92	%		1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	13C2-PFHxA	91	%		1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	79	%		1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	118	%		1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	100	%		1

**GAC-7-20200609 (202006090569)**

Sampled on 06/09/2020 1138

**EPA 537.1 - EPA Method 537.1**

06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	13C2-PFDA	87	%		1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	13C2-PFHxA	92	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	81	%		1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	114	%		1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**GAC-8-20200609 (202006090570)**

**Sampled on 06/09/2020 1141**

**EPA 537.1 - EPA Method 537.1**

06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	13C2-PFDA	93	%		1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	13C2-PFHxA	95	%		1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	84	%		1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	119	%		1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**IX-5-20200609 (202006090571)**

**Sampled on 06/09/2020 1144**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 537.1 - EPA Method 537.1</b>									
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	11-chloro-eicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	13C2-PFDA	99	%		1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	13C2-PFHxA	90	%		1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	86	%		1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	119	%		1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**IX-6-20200609 (202006090572)**

Sampled on 06/09/2020 1147

<b>EPA 537.1 - EPA Method 537.1</b>									
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	11-chloro-eicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	13C2-PFDA	99	%		1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	13C2-PFHxA	94	%		1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	88	%		1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	110	%		1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	116	%		1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**IX-7-20200609 (202006090573)**

Sampled on 06/09/2020 1150

**EPA 537.1 - EPA Method 537.1**

06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	13C2-PFDA	89	%		1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	13C2-PFHxA	87	%		1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	82	%		1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	112	%		1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	118	%		1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**IX-8-20200609 (202006090574)**

Sampled on 06/09/2020 1153

**EPA 537.1 - EPA Method 537.1**

06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	13C2-PFDA	94	%		1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	13C2-PFHxA	89	%		1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	118	%		1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	87	%		1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	117	%		1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**MB-INF-20200609 (202006090575)**

Sampled on 06/09/2020 1156

**SM 5310C - Total Organic Carbon**

06/13/20 00:19	1254850	(SM 5310C)	Total Organic Carbon	0.80	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

06/09/20 20:25	1254043	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
06/09/20 20:25	1254043	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5
06/09/20 20:25	1254043	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
06/09/20 20:25	1254043	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

06/09/20 20:25	1254042	(EPA 300.0)	Chloride	52	mg/L	2.5	5
06/09/20 20:25	1254042	(EPA 300.0)	Sulfate	78	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0076	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0027	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0060	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	13C2-PFDA	95	%		1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	13C2-PFHxA	81	%		1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	134	%		1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	75	%		1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	114	%		1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	127	%		1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	95	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	06/10/20 16:40		1254250	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1

**FB-20200609 (202006090576)**

**Sampled on 06/09/2020 1200**

**EPA 537.1 - EPA Method 537.1**

06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

**Report:** 875389  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	13C2-PFDA	101	%		1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	13C2-PFHxA	96	%		1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	13C3-HFPO-DA	92	%		1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	d3-NMeFOSAA	100	%		1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	d5-NEtFOSAA	102	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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1 800 566 LABS (1 800 566 5227)

**Report:** 875389  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

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**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1254042**

202006090565 LH-INF-20200609  
202006090575 MB-INF-20200609

**Analysis Date: 06/09/2020**

Analyzed by: HL7J  
Analyzed by: HL7J

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1254043**

202006090565 LH-INF-20200609  
202006090575 MB-INF-20200609

**Analysis Date: 06/09/2020**

Analyzed by: HL7J  
Analyzed by: HL7J

**Alkalinity in CaCO3 units**

**Analytical Batch: 1254250**

202006090565 LH-INF-20200609  
202006090575 MB-INF-20200609

**Analysis Date: 06/10/2020**

Analyzed by: ZB2Z  
Analyzed by: ZB2Z

**Total Organic Carbon**

**Analytical Batch: 1254850**

202006090565 LH-INF-20200609  
202006090575 MB-INF-20200609

**Analysis Date: 06/13/2020**

Analyzed by: ZS6I  
Analyzed by: ZS6I

**EPA Method 537.1**

**Prep Batch: 1254539 Analytical Batch: 1255097**

202006090542 GAC-1-20200609  
202006090558 GAC-2-20200609  
202006090559 GAC-3-20200609  
202006090560 GAC-4-20200609  
202006090561 IX-1-20200609  
202006090562 IX-2-20200609  
202006090563 IX-3-20200609  
202006090564 IX-4-20200609  
202006090565 LH-INF-20200609  
202006090566 LH-INF-DUP-20200609  
202006090567 GAC-5-20200609  
202006090568 GAC-6-20200609  
202006090569 GAC-7-20200609  
202006090570 GAC-8-20200609  
202006090571 IX-5-20200609  
202006090572 IX-6-20200609  
202006090573 IX-7-20200609  
202006090574 IX-8-20200609  
202006090575 MB-INF-20200609

**Analysis Date: 06/13/2020**

Analyzed by: Y7BM  
Analyzed by: Y7BM  
Analyzed by: Y7BM  
Analyzed by: Y7BM  
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Analyzed by: Y7BM  
Analyzed by: Y7BM

**EPA Method 537.1**

**Prep Batch: 1256161 Analytical Batch: 1256803**

202006090576 FB-20200609

**Analysis Date: 06/19/2020**

Analyzed by: SZZ

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1254042</b>					<b>Analysis Date: 06/09/2020</b>				
LCS1	Chloride		25	25.7	mg/L	103	(90-110)		
LCS2	Chloride		25	25.8	mg/L	103	(90-110)	20	0.39
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.450	mg/L	90	(50-150)		
MS_202005260385	Chloride	42	26	70.5	mg/L	113	(80-120)		
MS_202006090451	Chloride	29	26	57.4	mg/L	115	(80-120)		
MSD_202005260385	Chloride	42	26	69.7	mg/L	110	(80-120)	20	1.1
MSD_202006090451	Chloride	29	26	57.6	mg/L	115	(80-120)	20	0.33
LCS1	Sulfate		50	51.0	mg/L	102	(90-110)		
LCS2	Sulfate		50	51.2	mg/L	102	(90-110)	20	0.39
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.953	mg/L	95	(50-150)		
MRL_LW	Sulfate		0.25	0.238	mg/L	95	(50-150)		
MS_202005260385	Sulfate	150	50	ND	mg/L	109	(80-120)		
MS_202006090451	Sulfate	50	50	106	mg/L	112	(80-120)		
MSD_202005260385	Sulfate	150	50	ND	mg/L	105	(80-120)	20	0.78
MSD_202006090451	Sulfate	50	50	106	mg/L	112	(80-120)	20	0.23
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1254043</b>					<b>Analysis Date: 06/09/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.53	mg/L	101	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	102	(90-110)	20	0.79
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0505	mg/L	101	(50-150)		
MS_202005260385	Nitrate as Nitrogen by IC	3.2	2.6	5.98	mg/L	110	(80-120)		
MS_202006090451	Nitrate as Nitrogen by IC	0.41	2.6	3.13	mg/L	109	(80-120)		
MSD_202005260385	Nitrate as Nitrogen by IC	3.2	2.6	5.91	mg/L	107	(80-120)	20	1.2
MSD_202006090451	Nitrate as Nitrogen by IC	0.41	2.6	3.14	mg/L	109	(80-120)	20	0.63
LCS1	Nitrite Nitrogen by IC		1	0.991	mg/L	99	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.997	mg/L	100	(90-110)	20	0.60
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0510	mg/L	102	(50-150)		
MS_202005260385	Nitrite Nitrogen by IC	ND	1	0.980	mg/L	98	(80-120)		
MS_202006090451	Nitrite Nitrogen by IC	ND	1	1.09	mg/L	104	(80-120)		
MSD_202005260385	Nitrite Nitrogen by IC	ND	1	0.965	mg/L	97	(80-120)	20	1.5

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202006090451	Nitrite Nitrogen by IC	ND	1	1.10	mg/L	104	(80-120)	20	0.53

**Alkalinity in CaCO3 units by SM 2320B**

Analytical Batch: 1254250

Analysis Date: 06/10/2020

LCS1	Alkalinity in CaCO3 units		100	101	mg/L	101	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	101	mg/L	101	(90-110)	20	0.0
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.98	mg/L	99	(50-150)		
MS_202006090619	Alkalinity in CaCO3 units	240	100	333	mg/L	92	(80-120)		
MSD_202006090619	Alkalinity in CaCO3 units	240	100	333	mg/L	92	(80-120)	20	0.096

**Total Organic Carbon by SM 5310C**

Analytical Batch: 1254850

Analysis Date: 06/12/2020

LCS1	Total Organic Carbon		5	4.96	mg/L	99	(90-110)		
LCS2	Total Organic Carbon		5	4.94	mg/L	99	(90-110)	20	0.40
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.241	mg/L	120	(50-150)		
MS_202006030249	Total Organic Carbon	5.2	4	9.18	mg/L	99	(80-120)		
MS2_202006030256	Total Organic Carbon	ND	2	2.01	mg/L	97	(80-120)		
MSD_202006030249	Total Organic Carbon	5.2	4	9.27	mg/L	102	(80-120)	20	1
MSD2_202006030256	Total Organic Carbon	ND	2	1.98	mg/L	95	(80-120)	20	1.5

**EPA Method 537.1 by EPA 537.1**

Prep Batch: 1254539 Analytical Batch: 1255097

Analysis Date: 06/13/2020

DUP_202006090559	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0446	ug/L	95	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0439	ug/L	93	(70-130)	30	2.5
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00156	ug/L	83	(50-150)		
MS1_202006090561	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0187	ug/L	79	(70-130)		
DUP_202006090559	13C2-PFDA (S)			87.9	%	88	(70-130)		
LCS3	13C2-PFDA (S)		100	91.0	%	91	(70-130)		
LCS4	13C2-PFDA (S)		100	97.7	%	98	(70-130)		
MBLK	13C2-PFDA (S)			97.2	%	97	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	95.7	%	96	(70-130)		
MS1_202006090561	13C2-PFDA (S)		100	98.5	%	98	(70-130)		
DUP_202006090559	13C2-PFHxA (S)			93.6	%	94	(70-130)		
LCS3	13C2-PFHxA (S)		100	98.0	%	98	(70-130)		
LCS4	13C2-PFHxA (S)		100	101	%	101	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFHxA (S)			93.5	%	93	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	97.8	%	98	(70-130)		
MS1_202006090561	13C2-PFHxA (S)		100	85.2	%	85	(70-130)		
DUP_202006090559	13C2-PFOA- IS#1 (I)			120	%	120	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			107	%	107	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MS1_202006090561	13C2-PFOA- IS#1 (I)		100	117	%	117	(50-150)		
DUP_202006090559	13C3-HFPO-DA (S)			87.6	%	88	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	92.9	%	93	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	88.8	%	89	(70-130)		
MBLK	13C3-HFPO-DA (S)			81.7	%	82	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	85.2	%	85	(70-130)		
MS1_202006090561	13C3-HFPO-DA (S)		100	82.7	%	83	(70-130)		
DUP_202006090559	13C4-PFOS- IS#2 (I)			105	%	105	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	96.9	%	97	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	94.8	%	95	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS1_202006090561	13C4-PFOS- IS#2 (I)		100	108	%	108	(50-150)		
DUP_202006090559	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0460	ug/L	95	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0470	ug/L	97	(70-130)	30	2.4
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00190	ug/L	101	(50-150)		
MS1_202006090561	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0210	ug/L	89	(70-130)		
DUP_202006090559	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0433	ug/L	93	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0453	ug/L	97	(70-130)	30	5.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00178	ug/L	96	(50-150)		
MS1_202006090561	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0206	ug/L	89	(70-130)		
DUP_202006090559	d3-NMeFOSAA (I)			117	%	117	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
MBLK	d3-NMeFOSAA (I)			116	%	116	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	112	%	112	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202006090561	d3-NMeFOSAA (I)		100	119	%	119	(50-150)		
DUP_202006090559	d5-NEtFOSAA (S)			99.8	%	100	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	98.6	%	99	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	97.5	%	97	(70-130)		
MBLK	d5-NEtFOSAA (S)			100	%	101	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	104	%	104	(70-130)		
MS1_202006090561	d5-NEtFOSAA (S)		100	86.7	%	87	(70-130)		
DUP_202006090559	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0420	ug/L	84	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0394	ug/L	79	(70-130)	30	6.1
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00149	ug/L	75	(50-150)		
MS1_202006090561	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0200	ug/L	80	(70-130)		
DUP_202006090559	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0519	ug/L	104	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0515	ug/L	103	(70-130)	30	0.97
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00213	ug/L	107	(50-150)		
MS1_202006090561	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0239	ug/L	96	(70-130)		
DUP_202006090559	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0498	ug/L	100	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0483	ug/L	97	(70-130)	30	3.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00203	ug/L	102	(50-150)		
MS1_202006090561	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0238	ug/L	95	(70-130)		
DUP_202006090559	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0435	ug/L	98	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0467	ug/L	105	(70-130)	30	6.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00177	ug/L	100	(50-150)		
MS1_202006090561	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0214	ug/L	96	(70-130)		
DUP_202006090559	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0462	ug/L	93	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0499	ug/L	100	(70-130)	30	8.1
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202006090561	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0253	ug/L	101	(70-130)		
DUP_202006090559	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		

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 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0514	ug/L	103	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0532	ug/L	106	(70-130)	30	4.2
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00200	ug/L	100	(50-150)		
MS1_202006090561	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0218	ug/L	87	(70-130)		
DUP_202006090559	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0537	ug/L	107	(70-130)	30	5.2
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00234	ug/L	117	(50-150)		
MS1_202006090561	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0246	ug/L	98	(70-130)		
DUP_202006090559	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0469	ug/L	103	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0482	ug/L	106	(70-130)	30	2.5
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00186	ug/L	102	(50-150)		
MS1_202006090561	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0230	ug/L	101	(70-130)		
DUP_202006090559	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0520	ug/L	104	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0544	ug/L	109	(70-130)	30	4.5
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00231	ug/L	116	(50-150)		
MS1_202006090561	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0225	ug/L	90	(70-130)		
DUP_202006090559	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0485	ug/L	97	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0492	ug/L	98	(70-130)	30	2.5
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00214	ug/L	107	(50-150)		
MS1_202006090561	Perfluorononanoic acid (PFNA)	ND	0.025	0.0234	ug/L	93	(70-130)		
DUP_202006090559	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0456	ug/L	99	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0461	ug/L	100	(70-130)	30	0.22
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00190	ug/L	103	(50-150)		
MS1_202006090561	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0223	ug/L	96	(70-130)		
DUP_202006090559	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0513	ug/L	103	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0513	ug/L	103	(70-130)	30	0.59

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00226	ug/L	113	(50-150)		
MS1_202006090561	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0251	ug/L	100	(70-130)		
DUP_202006090559	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0504	ug/L	101	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0511	ug/L	102	(70-130)	30	2.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00196	ug/L	98	(50-150)		
MS1_202006090561	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0239	ug/L	96	(70-130)		
DUP_202006090559	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0472	ug/L	95	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0464	ug/L	93	(70-130)	30	1.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00188	ug/L	94	(50-150)		
MS1_202006090561	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0205	ug/L	82	(70-130)		
DUP_202006090559	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0485	ug/L	97	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0496	ug/L	99	(70-130)	30	3.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202006090561	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0232	ug/L	93	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1256161 Analytical Batch: 1256803

Analysis Date: 06/19/2020

DUP_202006170695	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0467	ug/L	99	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0451	ug/L	96	(70-130)	30	3.5
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00173	ug/L	92	(50-150)		
MS2_202006160507	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0448	ug/L	95	(70-130)		
DUP_202006170695	13C2-PFDA (S)			99.5	%	100	(70-130)		
LCS3	13C2-PFDA (S)		100	104	%	104	(70-130)		
LCS4	13C2-PFDA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFDA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	103	%	103	(70-130)		
MS2_202006160507	13C2-PFDA (S)		100	101	%	101	(70-130)		
DUP_202006170695	13C2-PFHxA (S)			98.2	%	98	(70-130)		
LCS3	13C2-PFHxA (S)		100	103	%	103	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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(I) - Indicates internal standard compound.

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Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MBLK	13C2-PFHxA (S)			100	%	100	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MS2_202006160507	13C2-PFHxA (S)		100	102	%	102	(70-130)		
DUP_202006170695	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			109	%	109	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MS2_202006160507	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
DUP_202006170695	13C3-HFPO-DA (S)			96.0	%	96	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	95.4	%	95	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	94.6	%	95	(70-130)		
MBLK	13C3-HFPO-DA (S)			92.7	%	93	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	98.4	%	98	(70-130)		
MS2_202006160507	13C3-HFPO-DA (S)		100	100	%	100	(70-130)		
DUP_202006170695	13C4-PFOS- IS#2 (I)			99.2	%	99	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	96.9	%	97	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	97.1	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.2	%	98	(50-150)		
MS2_202006160507	13C4-PFOS- IS#2 (I)		100	96.8	%	97	(50-150)		
DUP_202006170695	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0460	ug/L	95	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0454	ug/L	94	(70-130)	30	1.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00192	ug/L	102	(50-150)		
MS2_202006160507	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0449	ug/L	93	(70-130)		
DUP_202006170695	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0456	ug/L	98	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0449	ug/L	96	(70-130)	30	1.6
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00179	ug/L	97	(50-150)		
MS2_202006160507	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0447	ug/L	96	(70-130)		
DUP_202006170695	d3-NMeFOSAA (I)			97.5	%	97	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	98.5	%	99	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	94.6	%	95	(50-150)		
MBLK	d3-NMeFOSAA (I)			98.8	%	99	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	d3-NMeFOSAA (I)		100	95.9	%	96	(50-150)		
MS2_202006160507	d3-NMeFOSAA (I)		100	97.2	%	97	(50-150)		
DUP_202006170695	d5-NEtFOSAA (S)			99.2	%	99	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	97.6	%	98	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	98.0	%	98	(70-130)		
MBLK	d5-NEtFOSAA (S)			99.7	%	100	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	102	%	103	(70-130)		
MS2_202006160507	d5-NEtFOSAA (S)		100	99.7	%	100	(70-130)		
DUP_202006170695	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0415	ug/L	83	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0422	ug/L	84	(70-130)	30	1.7
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00176	ug/L	88	(50-150)		
MS2_202006160507	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0447	ug/L	89	(70-130)		
DUP_202006170695	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0478	ug/L	96	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0478	ug/L	96	(70-130)	30	0.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00194	ug/L	97	(50-150)		
MS2_202006160507	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0458	ug/L	92	(70-130)		
DUP_202006170695	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0478	ug/L	96	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0479	ug/L	96	(70-130)	30	0.21
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00200	ug/L	100	(50-150)		
MS2_202006160507	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0468	ug/L	94	(70-130)		
DUP_202006170695	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0451	ug/L	102	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0448	ug/L	101	(70-130)	30	0.67
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00184	ug/L	104	(50-150)		
MS2_202006160507	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0426	ug/L	96	(70-130)		
DUP_202006170695	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0494	ug/L	99	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0494	ug/L	99	(70-130)	30	0.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00210	ug/L	105	(50-150)		
MS2_202006160507	Perfluorodecanoic acid (PFDA)		0.05	0.0496	ug/L	99	(70-130)		

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202006170695	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0489	ug/L	98	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0488	ug/L	98	(70-130)	30	0.21
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00194	ug/L	97	(50-150)		
MS2_202006160507	Perfluorododecanoic acid (PFDoA)		0.05	0.0484	ug/L	97	(70-130)		
DUP_202006170695	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0490	ug/L	98	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0502	ug/L	100	(70-130)	30	2.4
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00213	ug/L	106	(50-150)		
MS2_202006160507	Perfluoroheptanoic acid (PFHpA)		0.05	0.0482	ug/L	96	(70-130)		
DUP_202006170695	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0454	ug/L	100	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0446	ug/L	98	(70-130)	30	1.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00187	ug/L	102	(50-150)		
MS2_202006160507	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0436	ug/L	96	(70-130)		
DUP_202006170695	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0505	ug/L	101	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0494	ug/L	99	(70-130)	30	2.2
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00221	ug/L	110	(50-150)		
MS2_202006160507	Perfluorohexanoic acid (PFHxA)		0.05	0.0490	ug/L	98	(70-130)		
DUP_202006170695	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0498	ug/L	100	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0515	ug/L	103	(70-130)	30	3.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00218	ug/L	109	(50-150)		
MS2_202006160507	Perfluorononanoic acid (PFNA)		0.05	0.0502	ug/L	100	(70-130)		
DUP_202006170695	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0464	ug/L	100	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0477	ug/L	103	(70-130)	30	2.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00195	ug/L	105	(50-150)		
MS2_202006160507	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0466	ug/L	97	(70-130)		
DUP_202006170695	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0489	ug/L	98	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 875389  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0502	ug/L	100	(70-130)	30	2.6
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00222	ug/L	111	(50-150)		
MS2_202006160507	Perfluorooctanoic acid (PFOA)	0.010	0.05	0.0487	ug/L	77	(70-130)		
DUP_202006170695	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0594	ug/L	119	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0566	ug/L	113	(70-130)	30	4.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00227	ug/L	114	(50-150)		
MS2_202006160507	Perfluorotetradecanoic acid (PFTA)		0.05	0.0576	ug/L	115	(70-130)		
DUP_202006170695	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0490	ug/L	98	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0486	ug/L	97	(70-130)	30	0.82
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00194	ug/L	97	(50-150)		
MS2_202006160507	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0486	ug/L	97	(70-130)		
DUP_202006170695	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0476	ug/L	95	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0476	ug/L	95	(70-130)	30	0.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00202	ug/L	101	(50-150)		
MS2_202006160507	Perfluoroundecanoic acid (PFUnA)		0.05	0.0461	ug/L	92	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 06/22/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_



**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 06/22/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large), MPN/100 mL (Total Coliform, E. Coli), Presence/Absence (P/A)\* (Total Coliform, E. Coli)

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

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Date of Issue: 06/22/2020

Quant Report - Page 1 of 1

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## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 879945  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 879945  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **July 07, 2020 at 1400**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202007070502	GAC-1-20200707 Static ID: 537.1 @537.1	07/07/2020 1003
202007070503	GAC-2-20200707 Static ID: 537.1 @537.1	07/07/2020 1006
202007070504	GAC-3-20200707 Static ID: 537.1 @537.1	07/07/2020 1009
202007070505	GAC-4-20200707 Static ID: 537.1 @537.1	07/07/2020 1012
202007070506	IX-1-20200707 Static ID: 537.1 @537.1	07/07/2020 1015
202007070507	IX-2-20200707 Static ID: 537.1 @537.1	07/07/2020 1018
202007070508	IX-3-20200707 Static ID: 537.1 @537.1	07/07/2020 1021
202007070509	IX-4-20200707 Static ID: 537.1 @537.1	07/07/2020 1024
202007070511	LH-INF-20200707 @537.1 Chloride	07/07/2020 1027
	@ANIONS48 Sulfate	Alkalinity in CaCO3 units Total Organic Carbon
202007070512	GAC-5-20200707 @537.1	07/07/2020 1133
202007070513	GAC-6-20200707 @537.1	07/07/2020 1136

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 879945  
Project: 0250000  
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

The following samples were received from you on **July 07, 2020 at 1400**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202007070514	GAC-7-20200707	07/07/2020 1139
	@537.1	
202007070515	GAC-8-20200707	07/07/2020 1142
	@537.1	
202007070516	IX-5-20200707	07/07/2020 1145
	@537.1	
202007070517	IX-6-20200707	07/07/2020 1148
	@537.1	
202007070518	IX-7-20200707	07/07/2020 1151
	@537.1	
202007070519	IX-8-20200707	07/07/2020 1154
	@537.1	
202007070520	MB-INF-20200707	07/07/2020 1157
	@537.1	
	Chloride	
	@ANIONS48	Alkalinity in CaCO3 units
	Sulfate	

#### Test Description

@537.1 -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0



*SP145*

<b>FROM:</b> GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com LABORATORY: Eurofins Eaton Analytical		<b>PROJECT NAME:</b> WRD Pilot <b>PROJECT CONTACT:</b> Miae Jeon <b>GLOBAL ID:</b>		<b>PROJECT NO.:</b> 5302 <b>LAB CONTACT:</b> Sophia Liang <b>SAMPLER(S): (PRINT)</b> RDT								
<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.												
LAB USE ONLY	SAMPLE ID	SAMPLING TIME		NO. OF CONT.	MATRIX	Field Filtered	Field Preserved	Unpreserved	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	GAC-1 - 20200707	7-7	1003	2	Water	X	2		X			
	GAC-2 - 20200707		1006	2	Water	X	2		X			
	GAC-3 - 20200707		1009	2	Water	X	2		X			
	GAC-4 - 20200707		1012	2	Water	X	2		X			
	IX-1 - 20200707		1015	2	Water	X	2		X			
	IX-2 - 20200707		1018	2	Water	X	2		X			
	IX-3 - 20200707		1021	2	Water	X	2		X			
	IX-4 - 20200707		1024	2	Water	X	2		X			
	LH-INF-20200707		1027	5	Water	X	23		X	X	X	
	LH-INF-BUFF				Water-							
	GAC-5 - 20200707	7-7	1133	2	Water	X	2		X			
	GAC-6 - 20200707		1136	2	Water	X	2		X			
	GAC-7 - 20200707		1139	2	Water	X	2		X			
	GAC-8 - 20200707		1142	2	Water	X	2		X			
Relinquished by: (Signature) <i>Paul Torres</i>						Received by: (Signature)			Date: <u>7-7-2020</u> Time: <u>1358</u>			
Relinquished by: (Signature)						Received by: (Signature) <i>Chloe Beale</i>			Date: <u>7-7-20</u> Time: <u>1400</u>			
Relinquished by: (Signature)						Received by: (Signature)			Date: _____ Time: _____			



FROM: GSI Environmental Inc.  
 19200 Von Karman Ave, Suite 800  
 Irvine, CA 92612  
 (949) 679-1070

PROJECT NAME: WRD Pilot

PROJECT NO.: 5302

PROJECT CONTACT: Miae Jeon

LAB CONTACT: Sophia Liang

GLOBAL ID:

SAMPLER(S): (PRINT)  
 RDT

TEL: (949) 679-1070

LABORATORY: Eurofins Eaton Analytical

E-MAIL: mjeon@gsi-net.com

TURNAROUND TIME:  
 SAME DAY  
 24 HR  
 48 HR  
 72 HR  
 5 DAYS  
 STANDARD

SPECIAL INSTRUCTIONS:  
 Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdorres@gsi-net.com;  
 Provide EDD of sample results

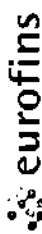
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Preservation			Field Filtered	TESTS							
		DATE	TIME			Unpreserved	Preserved	PFAS - full list (EPA 537.1)		Sulfate, Nitrate (as N), Nitrate (as NO <sub>3</sub> ), Chloride (EPA 300.0)	Alkalinity (as CaCO <sub>3</sub> ), (SM 2320B)	TOC (SM 5310C)					
	IX-5 - 20200707	7-7	1145	Water	2		2		X								
	IX-6 - 20200707		1148	Water	2		2		X								
	IX-7 - 20200707		1151	Water	2		2		X								
	IX-8 - 20200707		1154	Water	2		2		X								
	MB-INF - 20200707		1157	Water	5		23		X								
	MB-INF-DUP			Water					X								
	FB-20200707	7-7	1200	Water	1		1		X								

REQUESTED ANALYSES  
 Please check box or fill in blank as needed.

Received by: (Signature) *Roberto Torres* Date: 7-7-2020 Time: 1358

Received by: (Signature) *Julia Brecker* Date: 7-7-20 Time: 1400

Received by: (Signature)



Eaton Analytical

Kit Order for Water Replenishment District

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
(626) 386-1100 FAX (666) 988-3757

Created Date & Time: 4/20/2020 5:05:42PM

Note: Sampler Please return this paper with your samples

Client ID: WRD



Project Code: 0250000 Bottle Orders  
Group Name: WRD Pilot-short list  
PO#/JOB#:

Description: WRD Pilot-short list  
Shipping Method: Pickup by client

Kit #: 262154



Created By: Sophia F Liang - [SFL]  
Deliver By: 04/22/2020  
STG: Bottle Orders

Ice Type: G  
Pre Registered

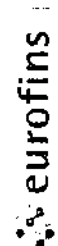
Ship Sample Kits to  
GSI Environmental Inc.  
Attn: Robert Torres  
Phone: 951-616-8406

Send Report to  
Attn:

Billing Address  
Water Replenishment District  
4040 Paramount Blvd  
Lakewood, CA 90712  
Attn: Brian Partington  
Phone: (562) 275-4245  
Fax: (562) 921-6101  
Water Replenishment District  
4040 Paramount Blvd  
Lakewood, CA 90712  
Attn: Brian Partington  
Phone: 562-275-4249  
Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [ preservative information ]	Total	UN DOT #
6	Total Organic Carbon	6	UN1830
6	@ANIONS48, Chloride, Sulfate	6	
6	Alkalinity in CaCO3 units	6	
12	@537.1	24	
1	@537.1	8	
2	@537.1	88	
12	@537.1 TB	12	
1	@537.1 TB	8	
2	@537.1 TB	88	
12	@537.1 FB	12	
1	@537.1 FB	8	
2	@537.1 FB	88	
<b>Sum Tests: 63</b>		<b>Sum Bottles: 354</b>	

Comments



Eaton Analytical

Kit Order for Water Replenishment District

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
(626) 386-1100 FAX (666) 988-3757

Created Date & Time: 4/20/2020 5:05:42PM

Note: Sampler Please return this paper with your samples

Kit #: 262154

Created By: Sophia F Liang - [SFL]  
Deliver By: 04/22/2020

STG: Bottle Orders  
Ice Type: G  
Pre Registered

Client ID: WRD



Project Code: 0250000 Bottle Orders  
Group Name: WRD Pilot-short list  
PO#/JOB#:

Description: WRD Pilot-short list  
Shipping Method: Pickup by client

Ship Sample Kits to  
GSI Environmental Inc.  
  
Attn: Robert Torres  
Phone: 951-616-8406

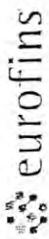
Send Report to  
  
Attn:

Billing Address  
Water Replenishment District  
4040 Paramount Blvd  
Lakewood, CA 90712  
  
Attn: Brian Partington  
Phone: (562) 275-4245  
Fax: (562) 921-6101  
Water Replenishment District  
4040 Paramount Blvd  
Lakewood, CA 90712  
  
Attn: Brian Partington  
Phone: 562-275-4249  
Fax: 562-921-6101

# of Sample Tests      Bottle Qty - Type [preservative information]      Total      UN DOT #

# of Sample Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
<b>SHIPPING:</b> - CLIENT PAU WEDNESDAY, APRIL 22ND BY 12PM - PROVIDE 3 EXTRA 48 QUART COOLERS  <b>GSI SAMPLER:</b> - PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COC ALONG WITH THE SAMPLES. - NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP. - AT THE SAMPLING SITE, OPEN THE CONTAINER LABELLED "@537.1 TB" AND POUR INTO THE EMPTY CONTAINER LABELLED "@537.1 FB".  <b>ASM:</b> *Please also send invoices to Miae Jeon (mjeon@gsi-net.com) *Report copies to be sent to Miae Jeon, mjeon@gsi-net.com, Pat Galvin, pgalvin@gsi-net.com, and rdtorres@gsi-net.com.			

Code      Status      Date Shipped      Via      Tracking #      # of Coolers      Prepared By



Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: SP145

## SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 616A (Observation = 13.3 °C) (Corr. Factor = 0.2 °C) (Final = 13.1 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

## Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Samsafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

7) VOA Headspace:  No Samples with Headspace:  Samples with Headspace (see below):   
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	None/≤6	>6mm	Samp ID	None/≤6	>6mm	Samp ID	None/≤6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: Chen Baek SIGNATURE: Chen Baek PRINT NAME: \_\_\_\_\_

COMPANY/TITLE: Eurofins Eaton Analytical DATE: 7.7.20 TIME: 1400

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	<b>202007070508</b>	<b><u>IX-3-20200707</u></b>				
07/10/2020 15:47	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
	<b>202007070511</b>	<b><u>LH-INF-20200707</u></b>				
07/13/2020 17:44	Alkalinity in CaCO3 units		200		mg/L	2.0
07/07/2020 21:46	Chloride		110	250	mg/L	2.5
07/07/2020 21:46	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
07/07/2020 21:46	Nitrate as NO3 (calc)		12	45	mg/L	2.2
07/10/2020 16:18	Perfluorobutanesulfonic acid (PFBS)		0.0062		ug/L	0.0020
07/10/2020 16:18	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
07/10/2020 16:18	Perfluorohexanesulfonic acid (PFHxS)		0.0065		ug/L	0.0020
07/10/2020 16:18	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
07/10/2020 16:18	Perfluorononanoic acid (PFNA)		0.0026		ug/L	0.0020
07/10/2020 16:18	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
07/10/2020 16:18	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
07/07/2020 21:46	Sulfate		180	250	mg/L	2.5
07/07/2020 21:46	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
07/10/2020 22:46	Total Organic Carbon		0.71		mg/L	0.30
	<b>202007070517</b>	<b><u>IX-6-20200707</u></b>				
07/10/2020 17:15	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
	<b>202007070518</b>	<b><u>IX-7-20200707</u></b>				
07/14/2020 04:38	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
	<b>202007070519</b>	<b><u>IX-8-20200707</u></b>				
07/09/2020 13:06	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
	<b>202007070520</b>	<b><u>MB-INF-20200707</u></b>				
07/10/2020 13:52	Alkalinity in CaCO3 units		170		mg/L	2.0
07/07/2020 21:59	Chloride		52	250	mg/L	2.5
07/07/2020 21:59	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
07/07/2020 21:59	Nitrate as NO3 (calc)		10	45	mg/L	2.2
07/09/2020 13:15	Perfluorobutanesulfonic acid (PFBS)		0.0084		ug/L	0.0020
07/09/2020 13:15	Perfluoroheptanoic acid (PFHpA)		0.0028		ug/L	0.0020
07/09/2020 13:15	Perfluorohexanesulfonic acid (PFHxS)		0.0059		ug/L	0.0020
07/09/2020 13:15	Perfluorohexanoic acid (PFHxA)		0.0035		ug/L	0.0020
07/09/2020 13:15	Perfluorononanoic acid (PFNA)		0.0033		ug/L	0.0020
07/09/2020 13:15	Perfluorooctanesulfonic acid (PFOS)		0.033		ug/L	0.0020
07/09/2020 13:15	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
Fax: (626) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Report:** 879945  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

Samples Received on:  
07/07/2020 1400

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
07/07/2020 21:59	Sulfate		79	250	mg/L	2.5
07/07/2020 21:59	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10

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Report: 879945  
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 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20200707 (202007070502)</b>						<b>Sampled on 07/07/2020 1003</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.0050	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	0.0020	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	13C2-PFDA	100	%	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	13C2-PFHxA	117	%	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	102	%	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	107	%	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	94	%	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	93	%	1
07/08/20	07/10/20	15:08	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	105	%	1

<b>GAC-2-20200707 (202007070503)</b>						<b>Sampled on 07/07/2020 1006</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
07/08/20	07/10/20	15:18	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0020	1
07/08/20	07/10/20	15:18	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



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 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	13C2-PFDA	87	%		1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	13C2-PFHxA	98	%		1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	89	%		1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	99	%		1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**GAC-3-20200707 (202007070504)**

Sampled on 07/07/2020 1009

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	13C2-PFDA	98	%		1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	13C2-PFHxA	105	%		1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	96	%		1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	95	%		1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**GAC-4-20200707 (202007070505)**

Sampled on 07/07/2020 1012

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	13C2-PFDA	96	%		1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	13C2-PFHxA	109	%		1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	96	%		1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	98	%		1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**IX-1-20200707 (202007070506)**

Static ID: 537.1

Sampled on 07/07/2020 1015

**EPA 537.1 - EPA Method 537.1**

07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	13C2-PFDA	93	%		1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	13C2-PFHxA	107	%		1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	95	%		1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	90	%		1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	94	%		1

**IX-2-20200707 (202007070507)**

**Sampled on 07/07/2020 1018**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	13C2-PFDA	87	%		1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	13C2-PFHxA	102	%		1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	93	%		1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	91	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	93	%		1
<b>IX-3-20200707 (202007070508)</b>						<b>Sampled on 07/07/2020 1021</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	13C2-PFDA	90	%		1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	13C2-PFHxA	103	%		1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	91	%		1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	96	%		1

<b>IX-4-20200707 (202007070509)</b>						<b>Sampled on 07/07/2020 1024</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	13C2-PFDA	91	%		1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	13C2-PFHxA	104	%		1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	96	%		1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	91	%		1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**LH-INF-20200707 (202007070511)**

Sampled on 07/07/2020 1027

**SM 5310C - Total Organic Carbon**

07/10/20 22:46	1261113	(SM 5310C)	Total Organic Carbon	0.71	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

07/07/20 21:46	1259866	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
07/07/20 21:46	1259866	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
07/07/20 21:46	1259866	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
07/07/20 21:46	1259866	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

07/07/20 21:46	1259877	(EPA 300.0)	Chloride	110	mg/L	2.5	5
07/07/20 21:46	1259877	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0062	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0065	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0026	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	13C2-PFDA	88	%		1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	13C2-PFHxA	103	%		1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	88	%		1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	94	%		1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	92	%		1

**SM 2320B - Alkalinity in CaCO3 units**

07/13/20 17:44	1261170	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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**GAC-5-20200707 (202007070512)**

Sampled on 07/07/2020 1133

**EPA 537.1 - EPA Method 537.1**

07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	13C2-PFDA	87	%		1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	13C2-PFHxA	102	%		1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	90	%		1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	92	%		1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**GAC-6-20200707 (202007070513)**

Sampled on 07/07/2020 1136

**EPA 537.1 - EPA Method 537.1**

07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	13C2-PFDA	89	%		1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	13C2-PFHxA	106	%		1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	93	%		1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	91	%		1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**GAC-7-20200707 (202007070514)**

Sampled on 07/07/2020 1139

**EPA 537.1 - EPA Method 537.1**

07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	13C2-PFDA	93	%		1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	13C2-PFHxA	107	%		1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	94	%		1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	89	%		1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	92	%		1

**GAC-8-20200707 (202007070515)**

Sampled on 07/07/2020 1142

**EPA 537.1 - EPA Method 537.1**

07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	13C2-PFDA	88	%		1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	13C2-PFHxA	104	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	91	%		1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	92	%		1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**IX-5-20200707 (202007070516)**

**Sampled on 07/07/2020 1145**

**EPA 537.1 - EPA Method 537.1**

07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	13C2-PFDA	90	%		1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	13C2-PFHxA	105	%		1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	94	%		1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	90	%		1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	92	%		1

**IX-6-20200707 (202007070517)**

**Sampled on 07/07/2020 1148**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 537.1 - EPA Method 537.1</b>									
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	11-chloro-eicos-afluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	13C2-PFDA	92	%		1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	13C2-PFHxA	105	%		1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	91	%		1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	89	%		1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**IX-7-20200707 (2020070518)**

Sampled on 07/07/2020 1151

<b>EPA 537.1 - EPA Method 537.1</b>									
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	11-chloro-eicos-afluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	13C2-PFDA	96	%		1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	13C2-PFHxA	97	%		1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	13C3-HFPO-DA	95	%		1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	d3-NMeFOSAA	106	%		1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**IX-8-20200707 (202007070519)**

Sampled on 07/07/2020 1154

**EPA 537.1 - EPA Method 537.1**

07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	13C2-PFDA	90	%		1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	13C2-PFHxA	87	%		1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	13C2-PFOA- IS#1	131	%		1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	13C3-HFPO-DA	80	%		1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	13C4-PFOS- IS#2	116	%		1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	d3-NMeFOSAA	101	%		1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**MB-INF-20200707 (202007070520)**

Sampled on 07/07/2020 1157

**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

07/07/20 21:59	1259866	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
07/07/20 21:59	1259866	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5
07/07/20 21:59	1259866	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
07/07/20 21:59	1259866	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

07/07/20 21:59	1259877	(EPA 300.0)	Chloride	52	mg/L	2.5	5
07/07/20 21:59	1259877	(EPA 300.0)	Sulfate	79	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	4,8-dioxo-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0084	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0028	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0059	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0035	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0033	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.033	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	13C2-PFDA	90	%		1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	13C2-PFHxA	76	%		1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	13C2-PFOA- IS#1	141	%		1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	13C3-HFPO-DA	74	%		1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	13C4-PFOS- IS#2	119	%		1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	d3-NMeFOSAA	106	%		1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	d5-NEtFOSAA	107	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	07/10/20 13:52		1260686	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1

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Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

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**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1259866**

202007070511 LH-INF-20200707  
 202007070520 MB-INF-20200707

**Analysis Date: 07/07/2020**

Analyzed by: B9PD  
 Analyzed by: B9PD

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1259877**

202007070511 LH-INF-20200707  
 202007070520 MB-INF-20200707

**Analysis Date: 07/07/2020**

Analyzed by: B9PD  
 Analyzed by: B9PD

**EPA Method 537.1**

**Prep Batch: 1259977 Analytical Batch: 1260562**

202007070519 IX-8-20200707  
 202007070520 MB-INF-20200707

**Analysis Date: 07/09/2020**

Analyzed by: SZZ  
 Analyzed by: SZZ

**Alkalinity in CaCO3 units**

**Analytical Batch: 1260686**

202007070520 MB-INF-20200707

**Analysis Date: 07/10/2020**

Analyzed by: ZB2Z

**Total Organic Carbon**

**Analytical Batch: 1261113**

202007070511 LH-INF-20200707

**Analysis Date: 07/10/2020**

Analyzed by: ZS6I

**EPA Method 537.1**

**Prep Batch: 1259960 Analytical Batch: 1261159**

202007070502 GAC-1-20200707  
 202007070503 GAC-2-20200707  
 202007070504 GAC-3-20200707  
 202007070505 GAC-4-20200707  
 202007070506 IX-1-20200707  
 202007070507 IX-2-20200707  
 202007070508 IX-3-20200707  
 202007070509 IX-4-20200707  
 202007070511 LH-INF-20200707  
 202007070512 GAC-5-20200707  
 202007070513 GAC-6-20200707  
 202007070514 GAC-7-20200707  
 202007070515 GAC-8-20200707  
 202007070516 IX-5-20200707  
 202007070517 IX-6-20200707

**Analysis Date: 07/10/2020**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
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**Alkalinity in CaCO3 units**

**Analytical Batch: 1261170**

202007070511 LH-INF-20200707

**Analysis Date: 07/13/2020**

Analyzed by: ZB2Z

**EPA Method 537.1**

**Prep Batch: 1260674 Analytical Batch: 1261499**

202007070518 IX-7-20200707

**Analysis Date: 07/14/2020**

Analyzed by: KAM



Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1259866</b>					<b>Analysis Date: 07/07/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	101	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	101	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0488	mg/L	98	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0125	mg/L	100	(50-150)		
MS_202005260570	Nitrate as Nitrogen by IC	3.6	2.6	6.28	mg/L	106	(80-120)		
MS_202007070520	Nitrate as Nitrogen by IC	2.4	6.5	9.11	mg/L	108	(80-120)		
MSD_202005260570	Nitrate as Nitrogen by IC	3.6	2.6	6.26	mg/L	105	(80-120)	20	0.39
MSD_202007070520	Nitrate as Nitrogen by IC	2.4	6.5	9.08	mg/L	107	(80-120)	20	0.34
LCS1	Nitrite Nitrogen by IC		1	1.00	mg/L	101	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.00	mg/L	100	(90-110)	20	1
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0502	mg/L	100	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0131	mg/L	105	(50-150)		
MS_202005260570	Nitrite Nitrogen by IC	ND	1	1.02	mg/L	102	(80-120)		
MS_202007070520	Nitrite Nitrogen by IC	ND	2.5	2.59	mg/L	104	(80-120)		
MSD_202005260570	Nitrite Nitrogen by IC	ND	1	1.01	mg/L	101	(80-120)	20	0.84
MSD_202007070520	Nitrite Nitrogen by IC	ND	2.5	2.58	mg/L	103	(80-120)	20	0.37
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1259877</b>					<b>Analysis Date: 07/07/2020</b>				
LCS1	Chloride		25	26.3	mg/L	105	(90-110)		
LCS2	Chloride		25	26.2	mg/L	105	(90-110)	20	0.38
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.456	mg/L	91	(50-150)		
MS_202005260570	Chloride	42	26	70.1	mg/L	110	(80-120)		
MS_202007070520	Chloride	52	65	125	mg/L	116	(80-120)		
MSD_202005260570	Chloride	42	26	69.6	mg/L	108	(80-120)	20	0.71
MSD_202007070520	Chloride	52	65	124	mg/L	115	(80-120)	20	0.63
LCS1	Sulfate		50	51.4	mg/L	103	(90-110)		
LCS2	Sulfate		50	51.5	mg/L	103	(90-110)	20	0.19
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.985	mg/L	99	(50-150)		
MRL_W	Sulfate		0.25	0.247	mg/L	99	(50-150)		
MS_202005260570	Sulfate	160	50	ND	mg/L				

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 879945  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202007070520	Sulfate	79	125	217	mg/L	110	(80-120)		
MSD_202005260570	Sulfate	160	50	ND	mg/L				
MSD_202007070520	Sulfate	79	125	216	mg/L	110	(80-120)	20	0.33

EPA Method 537.1 by EPA 537.1

Prep Batch: 1259977 Analytical Batch: 1260562

Analysis Date: 07/09/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0233	ug/L	99	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0226	ug/L	96	(70-130)	30	1.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00166	ug/L	89	(50-150)		
MS1_202007070018	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0225	ug/L	96	(70-130)		
MSD1_202007070018	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0231	ug/L	98	(70-130)	30	2.5
LCS1	13C2-PFDA (S)		100	97.6	%	98	(70-130)		
LCS2	13C2-PFDA (S)		100	94.2	%	94	(70-130)		
MBLK	13C2-PFDA (S)			97.4	%	97	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	91.3	%	91	(70-130)		
MS1_202007070018	13C2-PFDA (S)		100	99.5	%	100	(70-130)		
MSD1_202007070018	13C2-PFDA (S)		100	96.3	%	96	(70-130)		
LCS1	13C2-PFHxA (S)		100	103	%	103	(70-130)		
LCS2	13C2-PFHxA (S)		100	97.9	%	98	(70-130)		
MBLK	13C2-PFHxA (S)			102	%	102	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	93.8	%	94	(70-130)		
MS1_202007070018	13C2-PFHxA (S)		100	95.3	%	95	(70-130)		
MSD1_202007070018	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	117	%	117	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	121	%	121	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			121	%	121	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	118	%	118	(50-150)		
MS1_202007070018	13C2-PFOA- IS#1 (I)		100	116	%	117	(50-150)		
MSD1_202007070018	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	96.8	%	97	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	86.2	%	86	(70-130)		
MBLK	13C3-HFPO-DA (S)			93.0	%	93	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	87.8	%	88	(70-130)		
MS1_202007070018	13C3-HFPO-DA (S)		100	83.2	%	83	(70-130)		
MSD1_202007070018	13C3-HFPO-DA (S)		100	94.6	%	95	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	110	%	110	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	113	%	113	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C4-PFOS- IS#2 (I)			111	%	111	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	114	%	114	(50-150)		
MS1_202007070018	13C4-PFOS- IS#2 (I)		100	110	%	110	(50-150)		
MSD1_202007070018	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0255	ug/L	108	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0241	ug/L	102	(70-130)	30	3.7
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00198	ug/L	105	(50-150)		
MS1_202007070018	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0239	ug/L	101	(70-130)		
MSD1_202007070018	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0251	ug/L	106	(70-130)	30	5.0
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0252	ug/L	108	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0240	ug/L	103	(70-130)	30	4.1
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00186	ug/L	100	(50-150)		
MS1_202007070018	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0246	ug/L	106	(70-130)		
MSD1_202007070018	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0262	ug/L	112	(70-130)	30	6.2
LCS1	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	114	%	114	(50-150)		
MBLK	d3-NMeFOSAA (I)			113	%	113	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	111	%	111	(50-150)		
MS1_202007070018	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
MSD1_202007070018	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	94.9	%	95	(70-130)		
MBLK	d5-NEtFOSAA (S)			102	%	102	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	94.4	%	94	(70-130)		
MS1_202007070018	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MSD1_202007070018	d5-NEtFOSAA (S)		100	98.3	%	98	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0234	ug/L	93	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0210	ug/L	84	(70-130)	30	9.1
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00160	ug/L	80	(50-150)		
MS1_202007070018	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0183	ug/L	73	(70-130)		
MSD1_202007070018	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0222	ug/L	89	(70-130)	30	20
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0270	ug/L	108	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0266	ug/L	106	(70-130)	30	1.5
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00222	ug/L	111	(50-150)		

Spike recovery is already corrected for native results.  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202007070018	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0262	ug/L	105	(70-130)		
MSD1_202007070018	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0262	ug/L	105	(70-130)	30	0.19
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0252	ug/L	101	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0261	ug/L	104	(70-130)	30	4.3
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00208	ug/L	104	(50-150)		
MS1_202007070018	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0245	ug/L	98	(70-130)		
MSD1_202007070018	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0260	ug/L	104	(70-130)	30	6.1
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0230	ug/L	104	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0220	ug/L	100	(70-130)	30	4.4
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00172	ug/L	97	(50-150)		
MS1_202007070018	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0212	ug/L	96	(70-130)		
MSD1_202007070018	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0251	ug/L	113	(70-130)	30	17
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0248	ug/L	99	(70-130)	30	4.7
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00202	ug/L	101	(50-150)		
MS1_202007070018	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0248	ug/L	99	(70-130)		
MSD1_202007070018	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0249	ug/L	100	(70-130)	30	0.20
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0269	ug/L	107	(70-130)	30	0.37
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202007070018	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0262	ug/L	105	(70-130)		
MSD1_202007070018	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0271	ug/L	108	(70-130)	30	3.5
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0280	ug/L	112	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0277	ug/L	111	(70-130)	30	1.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00224	ug/L	112	(50-150)		
MS1_202007070018	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0271	ug/L	108	(70-130)		
MSD1_202007070018	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0286	ug/L	114	(70-130)	30	5.5
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0250	ug/L	110	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0250	ug/L	110	(70-130)	30	0.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00204	ug/L	112	(50-150)		
MS1_202007070018	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0240	ug/L	105	(70-130)		
MSD1_202007070018	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0257	ug/L	113	(70-130)	30	6.6

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0263	ug/L	105	(70-130)	30	2.6
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00208	ug/L	104	(50-150)		
MS1_202007070018	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0234	ug/L	94	(70-130)		
MSD1_202007070018	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0275	ug/L	110	(70-130)	30	16
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0256	ug/L	103	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0254	ug/L	102	(70-130)	30	2.3
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00201	ug/L	100	(50-150)		
MS1_202007070018	Perfluorononanoic acid (PFNA)	ND	0.025	0.0260	ug/L	104	(70-130)		
MSD1_202007070018	Perfluorononanoic acid (PFNA)	ND	0.025	0.0258	ug/L	103	(70-130)	30	0.84
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0246	ug/L	107	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0242	ug/L	105	(70-130)	30	3.3
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00191	ug/L	103	(50-150)		
MS1_202007070018	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0247	ug/L	106	(70-130)		
MSD1_202007070018	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0248	ug/L	106	(70-130)	30	0.28
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0280	ug/L	112	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0266	ug/L	106	(70-130)	30	5.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00224	ug/L	112	(50-150)		
MS1_202007070018	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0278	ug/L	110	(70-130)		
MSD1_202007070018	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0278	ug/L	111	(70-130)	30	0.14
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0246	ug/L	99	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0243	ug/L	97	(70-130)	30	2.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00186	ug/L	93	(50-150)		
MS1_202007070018	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0242	ug/L	97	(70-130)		
MSD1_202007070018	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0254	ug/L	102	(70-130)	30	4.8
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0239	ug/L	96	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0238	ug/L	95	(70-130)	30	0.84
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00181	ug/L	91	(50-150)		
MS1_202007070018	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0230	ug/L	92	(70-130)		
MSD1_202007070018	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0241	ug/L	96	(70-130)	30	4.7
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0255	ug/L	102	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0249	ug/L	100	(70-130)	30	4.3

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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 1 800 566 LABS (1 800 566 5227)

Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00202	ug/L	101	(50-150)		
MS1_202007070018	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0241	ug/L	96	(70-130)		
MSD1_202007070018	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0250	ug/L	100	(70-130)	30	3.7

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1260686

Analysis Date: 07/10/2020

LCS1	Alkalinity in CaCO3 units		100	104	mg/L	104	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.8	mg/L	99	(90-110)	20	5.1
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.91	mg/L	96	(50-150)		
MS_202007070093	Alkalinity in CaCO3 units	180	100	282	mg/L	96	(80-120)		
MS_202007090467	Alkalinity in CaCO3 units	220	100	266	mg/L	<u>42</u>	(80-120)		
MSD_202007070093	Alkalinity in CaCO3 units	180	100	280	mg/L	95	(80-120)	20	0.64
MSD_202007090467	Alkalinity in CaCO3 units	220	100	268	mg/L	<u>44</u>	(80-120)	20	0.57

Total Organic Carbon by SM 5310C

Analytical Batch: 1261113

Analysis Date: 07/10/2020

LCS1	Total Organic Carbon		5	5.40	mg/L	108	(90-110)		
LCS2	Total Organic Carbon		5	5.44	mg/L	109	(90-110)	20	0.74
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.246	mg/L	123	(50-150)		
MS_202007070808	Total Organic Carbon	ND	4	4.41	mg/L	108	(80-120)		
MS2_202007080627	Total Organic Carbon	1.8	2	3.88	mg/L	106	(80-120)		
MSD_202007070808	Total Organic Carbon	ND	4	4.40	mg/L	108	(80-120)	20	0.23
MSD2_202007080627	Total Organic Carbon	1.8	2	3.93	mg/L	109	(80-120)	20	1.3

EPA Method 537.1 by EPA 537.1

Prep Batch: 1259960 Analytical Batch: 1261159

Analysis Date: 07/10/2020

DUP_202007070505	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0465	ug/L	99	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0500	ug/L	106	(70-130)	30	7.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00210	ug/L	112	(50-150)		
MS1_202007070504	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0236	ug/L	100	(70-130)		
DUP_202007070505	13C2-PFDA (S)			93.2	%	93	(70-130)		
LCS3	13C2-PFDA (S)		100	90.6	%	91	(70-130)		
LCS4	13C2-PFDA (S)		100	93.7	%	94	(70-130)		
MBLK	13C2-PFDA (S)			96.0	%	96	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C2-PFDA (S)		100	93.9	%	94	(70-130)		
MS1_202007070504	13C2-PFDA (S)		100	94.1	%	94	(70-130)		
DUP_202007070505	13C2-PFHxA (S)			105	%	105	(70-130)		
LCS3	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS4	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFHxA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	109	%	109	(70-130)		
MS1_202007070504	13C2-PFHxA (S)		100	106	%	106	(70-130)		
DUP_202007070505	13C2-PFOA- IS#1 (I)			100	%	100	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.0	%	98	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	98.8	%	99	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			98.7	%	99	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MS1_202007070504	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
DUP_202007070505	13C3-HFPO-DA (S)			96.3	%	96	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	96.3	%	96	(70-130)		
MBLK	13C3-HFPO-DA (S)			98.1	%	98	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	98.2	%	98	(70-130)		
MS1_202007070504	13C3-HFPO-DA (S)		100	97.0	%	97	(70-130)		
DUP_202007070505	13C4-PFOS- IS#2 (I)			92.6	%	93	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	93.4	%	93	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	94.5	%	94	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			96.0	%	96	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	94.3	%	94	(50-150)		
MS1_202007070504	13C4-PFOS- IS#2 (I)		100	98.3	%	98	(50-150)		
DUP_202007070505	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0492	ug/L	101	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0497	ug/L	102	(70-130)	30	1.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00232	ug/L	123	(50-150)		
MS1_202007070504	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0265	ug/L	112	(70-130)		
DUP_202007070505	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0450	ug/L	97	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0472	ug/L	101	(70-130)	30	4.8
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00205	ug/L	110	(50-150)		
MS1_202007070504	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0232	ug/L	100	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007070505	d3-NMeFOSAA (I)			96.3	%	96	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	95.5	%	95	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	98.1	%	98	(50-150)		
MBLK	d3-NMeFOSAA (I)			99.3	%	99	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
MS1_202007070504	d3-NMeFOSAA (I)		100	97.8	%	98	(50-150)		
DUP_202007070505	d5-NEtFOSAA (S)			95.9	%	96	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	90.3	%	90	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	91.6	%	92	(70-130)		
MBLK	d5-NEtFOSAA (S)			90.6	%	91	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	90.1	%	90	(70-130)		
MS1_202007070504	d5-NEtFOSAA (S)		100	93.9	%	94	(70-130)		
DUP_202007070505	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0510	ug/L	102	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0499	ug/L	100	(70-130)	30	2.2
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00227	ug/L	114	(50-150)		
MS1_202007070504	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0256	ug/L	102	(70-130)		
DUP_202007070505	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0491	ug/L	98	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0488	ug/L	98	(70-130)	30	0.61
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00199	ug/L	99	(50-150)		
MS1_202007070504	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0254	ug/L	102	(70-130)		
DUP_202007070505	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0469	ug/L	94	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0484	ug/L	97	(70-130)	30	3.1
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00221	ug/L	111	(50-150)		
MS1_202007070504	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0252	ug/L	101	(70-130)		
DUP_202007070505	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0460	ug/L	104	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0463	ug/L	105	(70-130)	30	0.65
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00213	ug/L	120	(50-150)		
MS1_202007070504	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0234	ug/L	106	(70-130)		
DUP_202007070505	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0470	ug/L	94	(70-130)		

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Report: 879945  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0497	ug/L	99	(70-130)	30	5.6
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00223	ug/L	111	(50-150)		
MS1_202007070504	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0255	ug/L	102	(70-130)		
DUP_202007070505	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0442	ug/L	88	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0490	ug/L	98	(70-130)	30	10
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00211	ug/L	106	(50-150)		
MS1_202007070504	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0237	ug/L	95	(70-130)		
DUP_202007070505	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0559	ug/L	112	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0556	ug/L	111	(70-130)	30	0.54
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00261	ug/L	130	(50-150)		
MS1_202007070504	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0300	ug/L	120	(70-130)		
DUP_202007070505	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0476	ug/L	104	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0474	ug/L	104	(70-130)	30	0.42
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00216	ug/L	118	(50-150)		
MS1_202007070504	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0247	ug/L	108	(70-130)		
DUP_202007070505	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0548	ug/L	110	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0553	ug/L	111	(70-130)	30	0.91
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00263	ug/L	131	(50-150)		
MS1_202007070504	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0287	ug/L	115	(70-130)		
DUP_202007070505	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0492	ug/L	98	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0498	ug/L	100	(70-130)	30	1.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00235	ug/L	117	(50-150)		
MS1_202007070504	Perfluorononanoic acid (PFNA)	ND	0.025	0.0263	ug/L	105	(70-130)		
DUP_202007070505	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0457	ug/L	99	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0469	ug/L	101	(70-130)	30	2.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00215	ug/L	116	(50-150)		
MS1_202007070504	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0237	ug/L	102	(70-130)		
DUP_202007070505	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0522	ug/L	104	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0515	ug/L	103	(70-130)	30	1.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00251	ug/L	126	(50-150)		
MS1_202007070504	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0276	ug/L	110	(70-130)		
DUP_202007070505	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0527	ug/L	105	(70-130)	30	5.9
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00290	ug/L	145	(50-150)		
MS1_202007070504	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0266	ug/L	106	(70-130)		
DUP_202007070505	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0468	ug/L	94	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0494	ug/L	99	(70-130)	30	5.2
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00214	ug/L	107	(50-150)		
MS1_202007070504	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0243	ug/L	97	(70-130)		
DUP_202007070505	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0463	ug/L	93	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0513	ug/L	103	(70-130)	30	10
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00203	ug/L	102	(50-150)		
MS1_202007070504	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0245	ug/L	98	(70-130)		

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1261170

Analysis Date: 07/13/2020

LCS1	Alkalinity in CaCO3 units		100	97.7	mg/L	98	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.4	mg/L	98	(90-110)	20	0.71
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.86	mg/L	93	(50-150)		
MS_202007080946	Alkalinity in CaCO3 units	120	100	194	mg/L	<u>70</u>	(80-120)		
MS_202007090062	Alkalinity in CaCO3 units	110	100	172	mg/L	<u>62</u>	(80-120)		
MSD_202007080946	Alkalinity in CaCO3 units	120	100	186	mg/L	<u>63</u>	(80-120)	20	4.0
MSD_202007090062	Alkalinity in CaCO3 units	110	100	178	mg/L	<u>68</u>	(80-120)	20	3.4

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>EPA Method 537.1 by EPA 537.1</b>									
<b>Prep Batch: 1260674 Analytical Batch: 1261499</b>					<b>Analysis Date: 07/14/2020</b>				
DUP_202007090340	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0447	ug/L	95	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0442	ug/L	94	(70-130)	30	1.1
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00188	ug/L	100	(50-150)		
MS2_202007090120	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0433	ug/L	92	(70-130)		
DUP_202007090340	13C2-PFDA (S)			92.5	%	93	(70-130)		
LCS3	13C2-PFDA (S)		100	91.8	%	92	(70-130)		
LCS4	13C2-PFDA (S)		100	91.9	%	92	(70-130)		
MBLK	13C2-PFDA (S)			96.2	%	96	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	90.3	%	90	(70-130)		
MS2_202007090120	13C2-PFDA (S)		100	87.0	%	87	(70-130)		
DUP_202007090340	13C2-PFHxA (S)			97.7	%	98	(70-130)		
LCS3	13C2-PFHxA (S)		100	95.2	%	95	(70-130)		
LCS4	13C2-PFHxA (S)		100	97.5	%	98	(70-130)		
MBLK	13C2-PFHxA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	96.8	%	97	(70-130)		
MS2_202007090120	13C2-PFHxA (S)		100	95.1	%	95	(70-130)		
DUP_202007090340	13C2-PFOA- IS#1 (I)			100	%	100	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
MS2_202007090120	13C2-PFOA- IS#1 (I)		100	97.9	%	98	(50-150)		
DUP_202007090340	13C3-HFPO-DA (S)			94.2	%	94	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	92.8	%	93	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	94.4	%	94	(70-130)		
MBLK	13C3-HFPO-DA (S)			94.2	%	94	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	92.3	%	92	(70-130)		
MS2_202007090120	13C3-HFPO-DA (S)		100	93.5	%	93	(70-130)		
DUP_202007090340	13C4-PFOS- IS#2 (I)			96.6	%	97	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			100	%	100	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		

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Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202007090120	13C4-PFOS- IS#2 (I)		100	98.8	%	99	(50-150)		
DUP_202007090340	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0482	ug/L	99	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0485	ug/L	100	(70-130)	30	0.62
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00206	ug/L	109	(50-150)		
MS2_202007090120	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0482	ug/L	100	(70-130)		
DUP_202007090340	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0473	ug/L	101	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0477	ug/L	102	(70-130)	30	0.84
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00204	ug/L	110	(50-150)		
MS2_202007090120	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0460	ug/L	99	(70-130)		
DUP_202007090340	d3-NMeFOSAA (I)			101	%	101	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MBLK	d3-NMeFOSAA (I)			101	%	101	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MS2_202007090120	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
DUP_202007090340	d5-NEtFOSAA (S)			93.0	%	93	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	92.5	%	93	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	89.3	%	89	(70-130)		
MBLK	d5-NEtFOSAA (S)			95.3	%	95	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	89.2	%	89	(70-130)		
MS2_202007090120	d5-NEtFOSAA (S)		100	83.0	%	83	(70-130)		
DUP_202007090340	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0504	ug/L	101	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0502	ug/L	100	(70-130)	30	0.40
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00204	ug/L	102	(50-150)		
MS2_202007090120	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0504	ug/L	101	(70-130)		
DUP_202007090340	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0490	ug/L	98	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0500	ug/L	100	(70-130)	30	2.2
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00206	ug/L	103	(50-150)		
MS2_202007090120	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0454	ug/L	91	(70-130)		
DUP_202007090340	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

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Report: 879945  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0507	ug/L	101	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0503	ug/L	101	(70-130)	30	0.79
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS2_202007090120	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0471	ug/L	94	(70-130)		
DUP_202007090340	Perfluorobutanesulfonic acid (PFBS)	0.0042		0.00428	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0452	ug/L	102	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0464	ug/L	105	(70-130)	30	2.4
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00195	ug/L	110	(50-150)		
MS2_202007090120	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0463	ug/L	104	(70-130)		
DUP_202007090340	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0501	ug/L	100	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0507	ug/L	101	(70-130)	30	1.2
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00216	ug/L	108	(50-150)		
MS2_202007090120	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0491	ug/L	98	(70-130)		
DUP_202007090340	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0497	ug/L	100	(70-130)	30	0.0
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00206	ug/L	103	(50-150)		
MS2_202007090120	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0472	ug/L	94	(70-130)		
DUP_202007090340	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0534	ug/L	107	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0530	ug/L	106	(70-130)	30	0.75
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00231	ug/L	115	(50-150)		
MS2_202007090120	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0548	ug/L	108	(70-130)		
DUP_202007090340	Perfluorohexanesulfonic acid (PFHxS)	0.020		0.0196	ug/L		(0-30)	30	0.21
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0467	ug/L	102	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0473	ug/L	104	(70-130)	30	1.3
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00197	ug/L	108	(50-150)		
MS2_202007090120	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0467	ug/L	101	(70-130)		
DUP_202007090340	Perfluorohexanoic acid (PFHxA)	0.0037		0.00382	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0529	ug/L	106	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0542	ug/L	108	(70-130)	30	2.4

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 879945  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00237	ug/L	119	(50-150)		
MS2_202007090120	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0537	ug/L	104	(70-130)		
DUP_202007090340	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0538	ug/L	108	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0523	ug/L	105	(70-130)	30	2.8
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00223	ug/L	111	(50-150)		
MS2_202007090120	Perfluorononanoic acid (PFNA)	ND	0.05	0.0509	ug/L	101	(70-130)		
DUP_202007090340	Perfluorooctanesulfonic acid (PFOS)	0.025		0.0254	ug/L		(0-30)	30	2.7
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0481	ug/L	104	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0490	ug/L	106	(70-130)	30	1.9
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00207	ug/L	112	(50-150)		
MS2_202007090120	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0496	ug/L	104	(70-130)		
DUP_202007090340	Perfluorooctanoic acid (PFOA)	0.0034		0.00360	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0518	ug/L	104	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0536	ug/L	107	(70-130)	30	3.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00235	ug/L	118	(50-150)		
MS2_202007090120	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0545	ug/L	106	(70-130)		
DUP_202007090340	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0559	ug/L	112	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0554	ug/L	111	(70-130)	30	0.90
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00259	ug/L	130	(50-150)		
MS2_202007090120	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0545	ug/L	108	(70-130)		
DUP_202007090340	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0512	ug/L	102	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0523	ug/L	105	(70-130)	30	2.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00215	ug/L	107	(50-150)		
MS2_202007090120	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0494	ug/L	99	(70-130)		
DUP_202007090340	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0507	ug/L	101	(70-130)	30	3.5
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00215	ug/L	107	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

**Report:** 879945  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202007090120	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0492	ug/L	99	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 07/14/2020

Quant Report - Page 1 of 1

, Tel Fax



**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows: P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 07/14/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for  
Presence or Absence, Quantification of Total Coliform and E. Coli  
By Quantitray**

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 07/14/2020

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)



## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 878992  
Project: 0250000  
Group: WRD Pilot [Set #1]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 878992  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **June 30, 2020 at 1622**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202006300488	GAC-1M-20200630	06/30/2020 1203
	Static ID: SET A 537.1	
	@537.1	
202006300489	GAC-2M-20200630	06/30/2020 1206
	@537.1	
202006300490	GAC-3M-20200630	06/30/2020 1209
	@537.1	
202006300491	GAC-4M-20200630	06/30/2020 1212
	@537.1	
202006300492	IX-1M-20200630	06/30/2020 1215
	@537.1	
202006300493	IX-2M-20200630	06/30/2020 1218
	@537.1	
202006300494	IX-3M-20200630	06/30/2020 1221
	@537.1	
202006300495	IX-4M-20200630	06/30/2020 1224
	@537.1	
202006300497	LH-INF-20200630	06/30/2020 1227
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Calcium Total ICAP
	Chloride	Iron Total ICAP
	Magnesium Total ICAP	Oil and Grease by 1664(subbed)
	Perchlorate	Sodium Total ICAP
	Sulfate	Total Hardness as CaCO3 by ICP
	Total Organic Carbon	Uranium by ICPMS as pCi/L
	Uranium ICAP/MS	
	Arsenic Total ICAP/MS	
	Hexavalent chromium(Dissolved)	
	Manganese Total ICAP/MS	
	Potassium Total ICAP	
	Total Dissolved Solid (TDS)	
	Total Suspended Solids (TSS)	
202006300498	LH-INF-DUP-20200630	06/30/2020 1230
	@537.1	
202006300499	GAC-5M-20200630	06/30/2020 1343



**Acknowledgement of Samples Received**

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 878992  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **June 30, 2020 at 1622**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202006300500	GAC-6M-20200630	06/30/2020 1346
	@537.1	
202006300501	GAC-7M-20200630	06/30/2020 1349
	@537.1	
202006300502	GAC-8M-20200630	06/30/2020 1352
	@537.1	
202006300503	IX-5M-20200630	06/30/2020 1355
	@537.1	
202006300504	IX-6M-20200630	06/30/2020 1358
	@537.1	
202006300505	IX-7M-20200630	06/30/2020 1401
	@537.1	
202006300506	IX-8M-20200630	06/30/2020 1404
	@537.1	
202006300510	MB-INF-20200630	06/30/2020 1407
	@537.1	
	Chloride	
	@ANIONS48	Alkalinity in CaCO3 units
	Sulfate	Total Organic Carbon
202006300511	FB - 20200630	06/30/2020 1410
	@537.1 FB	

**Test Description**

@537.1 -- EPA Method 537.1

@537.1 FB -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

@VOASDWA -- Volatile Organics by GCMS

878992

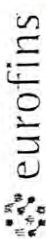
FROM: GSI Environmental Inc. PROJECT NAME: WRD Pilot  
19200 Von Karman Ave, Suite 800 PROJECT CONTACT: Miae Jeon  
Irvine, CA 92612 GLOBAL ID:  
(949) 679-1070 E-MAIL: mjeon@gsi-net.com

TEL: (949) 679-1070 LABORATORY: Eurofins Eaton Analytical

PROJECT NO.: 5302  
LAB CONTACT: Sophia Liang  
SAMPLER(S): (PRINT)

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	REQUESTED ANALYSES															
		DATE	TIME			Field Filtered	Preserved	Unpreserved													
	GAC-1M-20200630	6-30	1203	Water	2																
	GAC-2M-20200630		1206	Water	2																
	GAC-3M-20200630		1209	Water	2																
	GAC-4M-20200630		1212	Water	2																
	IX-1M-20200630		1215	Water	2																
	IX-2M-20200630		1218	Water	2																
	IX-3M-20200630		1221	Water	2																
	IX-4M-20200630		1224	Water	2																
	LH-INF-20200630		1227	Water	14		410														
	LH-INF-DUP-20200630		1230	Water	2		2														
	GAC-5M-20200630		1343	Water	2																
	GAC-6M-20200630		1346	Water	2																
	GAC-7M-20200630		1349	Water	2																
	GAC-8M-20200630		1352	Water	2																
Relinquished by: (Signature) [Signature]						Received by: (Signature) [Signature]			Date: 6-30-20	Time: 6:22											
Relinquished by: (Signature) [Signature]						Received by: (Signature) [Signature]			Date:	Time:											
Relinquished by: (Signature) [Signature]						Received by: (Signature) [Signature]			Date:	Time:											

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302																
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang																
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) <u>RDT</u>																
LABORATORY: Eurofins Eaton Analytical		<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.																		
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																				
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results																				
LAB USE ONLY	SAMPLE ID	TIME DATE	SAMPLING DATE TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrite (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)								
	IX-5M-20200630	1355	6-30	Water	2		2		X											
	IX-6M-20200630	1358	↓	Water	2		2		X											
	IX-7M-20200630	1401	↓	Water	2		2		X											
	IX-8M-20200630	1404	↓	Water	2		2		X											
	MB-INF-20200630	1407	↓	Water	5		23		X	X	X	X								
	MB-INF-DUP			Water																
	FB-20200630	1410	6-30	Water	1		1													
Relinquished by: (Signature) <u>[Signature]</u> <u>6-30-2020</u> <u>1622</u>						Received by: (Signature) <u>[Signature]</u>		Date: <u>6-30-20</u>		Time: <u>1622</u>										
Relinquished by: (Signature)						Received by: (Signature)		Date:		Time:										
Relinquished by: (Signature)						Received by: (Signature)		Date:		Time:										



Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 878692

SAMPLE TEMP RECEIVED:  
Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 649A (Observation = 19.0 °C) (Corr.Factor = 0.3 °C) (Final = 13.7 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Partially Frozen  Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (If received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= _____ °C) (Corr.Factor= _____ °C) (Final = _____ °C)	2 = (Observation= _____ °C) (Corr.Factor= _____ °C) (Final = _____ °C)
3 = (Observation= _____ °C) (Corr.Factor= _____ °C) (Final = _____ °C)	4 = (Observation= _____ °C) (Corr.Factor= _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (If received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Samsafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

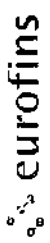
7) VOA Headspace:  No Samples with Headspace:  Samples with Headspace (see below):   
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251, 552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	>6mm	None/<6	mm	Samp ID	Bottle #	>6mm	None/<6	mm	Samp ID	Bottle #	>6mm	None/<6	mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: <u>Yan</u>	PRINT NAME: <u>paul hills</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>6-30-20</u>	TIME: <u>1622</u>
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Sober Analytical

Kit Order for Water Replenishment District  
 Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100  
 Monrovia, California 91016-3629  
 (626) 386-1100 FAX (666) 988-3757

Created Date & Time: 5/27/2020 6:04:42PM

**Note: Sampler Please return this paper with your samples**

Kit #: 264841



Client ID: WRD



Created By: Anisha Zachariah - [ZR4B]

Deliver By: 06/08/2020

STG: Bottle Orders

Ice Type: G

Project Code: 0250000 Bottle Orders

Group Name: WRD Pilot [Set#1]

PO#/JOB#:

Description: WRD Pilot Set #1

Shipping Method: Pickup by client

**Ship Sample Kits to**  
 GSI Environmental Inc.  
 Attn: Robert Torres  
 Phone: 951-616-8406

**Send Report to**  
 Water Replenishment District  
 4040 Paramount Blvd  
 Lakewood, CA 90712  
 Attn: Joseph Liles  
 Phone: 562-275-4226

**Billing Address**  
 Water Replenishment District  
 Attn: Eurofins Calscience  
 Water Replenishment District  
 4040 Paramount Blvd  
 Lakewood, CA 90712  
 Attn: Brian Partington  
 Phone: 562-275-4249  
 Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
2	Total Organic Carbon	2	UN1830
2	Hexavalent Chromium (Dissolved)	2	
2	@ANIONS48, Chloride, Sulfate	2	
2	Perchlorate	2	
2	Oil and Grease by 1664(subbed)	4	
2	Alkalinity in CaCO3 units	2	
4	@537.1	8	
2	@VOASDWA	6	UN1789
2	Arsenic Total ICAP/MS, Calcium Total ICAP, Iron Total ICAP, Magnesium Total ICAP, Manganese Total ICAP/MS, Potassium Total ICAP, Sodium Total ICAP, Uranium by ICP/MS as pCi/L, Uranium ICAP/MS	2	UN2031
2	Total Dissolved Solid (TDS), Total Suspended Solids (TSS)	2	

**Sum Tests: 22**

**Sum Bottles: 32**

Comments

### Kit Order for Water Replenishment District

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
(626) 386-1100 FAX (866) 988-3757

Created Date & Time: 5/27/2020 6:04:42PM

**Note: Sampler Please return this paper with your samples**

Kit #: 264841



Client ID: WRD



Project Code: 0250000 Bottle Orders  
Group Name: WRD Pilot (Sat#1)  
PO#/JOB#:

Created By: Anisha Zachariah - [ZR4B]

Deliver By: 06/08/2020

STG: Bottle Orders

Ice Type: G

Description: WRD Pilot Set #1

Shipping Method: Pickup by client

Ship Sample Kits to  
GSI Environmental Inc.

Attn: Robert Torres  
Phone: 951-616-8406

Send Report to  
Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712

Attn: Joseph Liles  
Phone: 562-275-4226

Billing Address  
Water Replenishment District

Attn: Eurofins Calscience

Water Replenishment District  
4040 Paramount Blvd  
Lakewood, CA 90712

Attn: Brian Partington  
Phone: 562-275-4249  
Fax: 562-921-6101

# of Sample Tests: [Blank] Bottle Qty - Type: [preservative information] Total UN DOT #

SHIPPING:  
- CLIENT P/U TUESDAY, JUNE 9TH MORNING  
- PACKAGE IN 2 LARGE COOLERS

GSI SAMPLER:  
- PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COC ALONG WITH THE SAMPLES.  
- NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP.

ASM:  
•Please also send invoices to Miae Jeon (mjeon@gsi-net.com)  
•Report copies to be sent to Miae Jeon, mjeon@gsi-net.com, Pat Galvin, pgalvin@gsi-net.com, and rdtorres@gsi-net.com.

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 878992  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

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**Flags Legend:**

R7 - LFB/LFBD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	<b>202006300494</b>	<b><u>IX-3M-20200630</u></b>				
07/02/2020 22:40	Perfluorohexanoic acid (PFHxA)		0.0022		ug/L	0.0020
	<b>202006300497</b>	<b><u>LH-INF-20200630</u></b>				
07/06/2020 14:49	Alkalinity in CaCO3 units		200		mg/L	2.0
07/08/2020 15:47	Arsenic Total ICAP/MS		3.1	10	ug/L	1.0
07/01/2020 13:33	Calcium Total ICAP		110		mg/L	1.0
07/01/2020 03:10	Chloride		100	250	mg/L	5.0
07/07/2020 0:00	Chloroform (Trichloromethane)		0.64		ug/L	0.50
07/02/2020 16:17	Hexavalent chromium(Dissolved)		0.70		ug/L	0.020
07/01/2020 13:33	Magnesium Total ICAP		21		mg/L	0.10
07/01/2020 03:10	Nitrate as Nitrogen by IC		2.7	10	mg/L	1.0
07/01/2020 03:10	Nitrate as NO3 (calc)		12	45	mg/L	4.4
07/10/2020 13:34	Oil and Grease by 1664(subbed)		3.52		mg/L	0.95
07/06/2020 17:44	Perfluorobutanesulfonic acid (PFBS)		0.0060		ug/L	0.0020
07/06/2020 17:44	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
07/06/2020 17:44	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
07/06/2020 17:44	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
07/06/2020 17:44	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
07/06/2020 17:44	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
07/01/2020 13:33	Potassium Total ICAP		4.7		mg/L	1.0
07/01/2020 13:33	Sodium Total ICAP		70		mg/L	1.0
07/01/2020 03:10	Sulfate		170	250	mg/L	5.0
07/02/2020 22:16	Total Dissolved Solids (TDS)		650	500	mg/L	10
07/01/2020 15:03	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
07/01/2020 03:10	Total Nitrate, Nitrite-N, CALC		2.7		mg/L	0.10
07/07/2020 16:48	Total Organic Carbon		0.69		mg/L	0.30
07/07/2020 0:00	Total THM		0.64	80	ug/L	0.50
07/08/2020 16:38	Uranium by ICPMS as pCi/L		3.8		pCi/L	0.70
07/08/2020 15:47	Uranium ICAP/MS		5.6	30	ug/L	1.0
	<b>202006300498</b>	<b><u>LH-INF-DUP-20200630</u></b>				
07/06/2020 18:51	Perfluorobutanesulfonic acid (PFBS)		0.0058		ug/L	0.0020
07/06/2020 18:51	Perfluorohexanesulfonic acid (PFHxS)		0.0061		ug/L	0.0020
07/06/2020 18:51	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
07/06/2020 18:51	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
07/06/2020 18:51	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
07/06/2020 18:51	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202006300499      <u>GAC-5M-20200630</u></b>						
07/06/2020 19:01	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
07/06/2020 19:01	Perfluorooctanoic acid (PFOA)		0.0022		ug/L	0.0020
<b>202006300501      <u>GAC-7M-20200630</u></b>						
07/06/2020 19:20	Perfluorobutanesulfonic acid (PFBS)		0.0025		ug/L	0.0020
<b>202006300503      <u>IX-5M-20200630</u></b>						
07/06/2020 19:50	Perfluorohexanoic acid (PFHxA)		0.0029		ug/L	0.0020
07/06/2020 19:50	Perfluorooctanoic acid (PFOA)		0.0045		ug/L	0.0020
<b>202006300504      <u>IX-6M-20200630</u></b>						
07/06/2020 20:01	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
07/06/2020 20:01	Perfluorooctanoic acid (PFOA)		0.0037		ug/L	0.0020
<b>202006300505      <u>IX-7M-20200630</u></b>						
07/06/2020 20:10	Perfluoroheptanoic acid (PFHpA)		0.0029		ug/L	0.0020
07/06/2020 20:10	Perfluorohexanoic acid (PFHxA)		0.0046		ug/L	0.0020
07/06/2020 20:10	Perfluorooctanoic acid (PFOA)		0.0065		ug/L	0.0020
<b>202006300506      <u>IX-8M-20200630</u></b>						
07/06/2020 18:03	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
07/06/2020 18:03	Perfluorooctanoic acid (PFOA)		0.0034		ug/L	0.0020
<b>202006300510      <u>MB-INF-20200630</u></b>						
07/02/2020 12:40	Alkalinity in CaCO3 units		170		mg/L	2.0
07/01/2020 03:49	Chloride		54	250	mg/L	2.5
07/01/2020 03:49	Nitrate as Nitrogen by IC		2.3	10	mg/L	0.50
07/01/2020 03:49	Nitrate as NO3 (calc)		10	45	mg/L	2.2
07/06/2020 20:20	Perfluorobutanesulfonic acid (PFBS)		0.0087		ug/L	0.0020
07/06/2020 20:20	Perfluoroheptanoic acid (PFHpA)		0.0031		ug/L	0.0020
07/06/2020 20:20	Perfluorohexanesulfonic acid (PFHxS)		0.0060		ug/L	0.0020
07/06/2020 20:20	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
07/06/2020 20:20	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
07/06/2020 20:20	Perfluorooctanesulfonic acid (PFOS)		0.033		ug/L	0.0020
07/06/2020 20:20	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
07/01/2020 03:49	Sulfate		79	250	mg/L	2.5
07/01/2020 03:49	Total Nitrate, Nitrite-N, CALC		2.3		mg/L	0.10
07/07/2020 18:32	Total Organic Carbon		0.76		mg/L	0.30

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1M-20200630 (202006300488)</b>						<b>Sampled on 06/30/2020 1203</b>			
Static ID: SET A 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	13C2-PFDA	104	%		1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	13C2-PFHxA	106	%		1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	101	%		1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	105	%		1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	102	%		1

<b>GAC-2M-20200630 (202006300489)</b>						<b>Sampled on 06/30/2020 1206</b>			
<b>EPA 537.1 - EPA Method 537.1</b>									
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	13C2-PFDA	103	%		1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	13C2-PFHxA	105	%		1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	96	%		1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	111	%		1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**GAC-3M-20200630 (202006300490)**

Sampled on 06/30/2020 1209

**EPA 537.1 - EPA Method 537.1**

07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	13C2-PFDA	108	%		1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	13C2-PFHxA	106	%		1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	85	%		1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	82	%		1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	93	%		1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**GAC-4M-20200630 (202006300491)**

Sampled on 06/30/2020 1212

**EPA 537.1 - EPA Method 537.1**

07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	13C2-PFDA	108	%		1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	13C2-PFHxA	106	%		1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	86	%		1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	100	%		1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	87	%		1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	94	%		1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**IX-1M-20200630 (202006300492)**

Sampled on 06/30/2020 1215

**EPA 537.1 - EPA Method 537.1**

07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	13C2-PFDA	108	%		1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	13C2-PFHxA	101	%		1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	97	%		1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	109	%		1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**IX-2M-20200630 (202006300493)**

**Sampled on 06/30/2020 1218**

**EPA 537.1 - EPA Method 537.1**

07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	13C2-PFDA	105	%		1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	13C2-PFHxA	105	%		1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	87	%		1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	99	%		1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	84	%		1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	92	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	103	%		1
<b>IX-3M-20200630 (202006300494)</b>						<b>Sampled on 06/30/2020 1221</b>			
<b>EPA 537.1 - EPA Method 537.1</b>									
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0022	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	13C2-PFDA	109	%		1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	13C2-PFHxA	106	%		1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	100	%		1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	109	%		1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**IX-4M-20200630 (202006300495)**

**Sampled on 06/30/2020 1224**

**EPA 537.1 - EPA Method 537.1**

07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	13C2-PFDA	109	%		1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	13C2-PFHxA	106	%		1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	85	%		1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	101	%		1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	82	%		1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	91	%		1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	107	%		1

**LH-INF-20200630 (202006300497)**

Sampled on 06/30/2020 1227

**EPA 200.8 - ICPMS Metals**

07/01/20	07/08/20 15:47	1258782	1259874	(EPA 200.8)	Arsenic Total ICAP/MS	3.1	ug/L	1.0	1
07/01/20	07/08/20 15:47	1258782	1259874	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
07/01/20	07/08/20 15:47	1258782	1259874	(EPA 200.8)	Uranium ICAP/MS	5.6	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

07/01/20	07/01/20 13:33	1258782	1258807	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
07/01/20	07/01/20 13:33	1258782	1258807	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
07/01/20	07/01/20 13:33	1258782	1258807	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
07/01/20	07/01/20 13:33	1258782	1258807	(EPA 200.7)	Potassium Total ICAP	4.7	mg/L	1.0	1
07/01/20	07/01/20 13:33	1258782	1258807	(EPA 200.7)	Sodium Total ICAP	70	mg/L	1.0	1

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 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>SM 5310C - Total Organic Carbon</b>									
	07/07/20 16:48		1260013	(SM 5310C)	Total Organic Carbon	0.69	mg/L	0.30	1
<b>EPA 200.8 - Uranium by ICPMS as pCi/L</b>									
	07/08/20 16:38			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.8 (c)	pCi/L	0.70	1
<b>SM 2340B - Total Hardness as CaCO3 by ICP</b>									
	07/01/20 15:03			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
<b>EPA 218.6 - Hexavalent chromium(Dissolved)</b>									
	07/02/20 16:17		1259301	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.70	ug/L	0.020	1
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>									
	07/01/20 03:10		1258690	(EPA 300.0)	Nitrate as Nitrogen by IC	2.7	mg/L	1.0	10
	07/01/20 03:10		1258690	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	4.4	10
	07/01/20 03:10		1258690	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.12	10
	07/01/20 03:10		1258690	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.7	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	07/01/20 03:10		1258691	(EPA 300.0)	Chloride	100	mg/L	5.0	10
	07/01/20 03:10		1258691	(EPA 300.0)	Sulfate	170	mg/L	5.0	10
<b>EPA 314.0 - Perchlorate</b>									
	07/02/20 20:53	(1)	1259131	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0060	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1

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07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	13C2-PFDA	96	%		1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	13C2-PFHxA	96	%		1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	92	%		1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	109	%		1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	99	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	07/10/20 13:34			(EPA 1664)	Oil and Grease by 1664(subbed)	3.52	mg/L	0.95	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1

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07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Carbon Tetrachloride	ND (R7)	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Chloroform (Trichloromethane)	0.64	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Total THM	0.64	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,2-Dichloroethane-d4	116	%		1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	4-Bromofluorobenzene	92	%		1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Toluene-d8	95	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	07/06/20 14:49		1259518	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
07/02/20	07/02/20 22:16	1259222	1259225	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	650	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	07/06/20 23:22		1259640	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<b><u>LH-INF-DUP-20200630 (202006300498)</u></b>					<b>Sampled on 06/30/2020 1230</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0058	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0061	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1

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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	13C2-PFDA	102	%		1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	13C2-PFHxA	101	%		1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	110	%		1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**GAC-5M-20200630 (202006300499)**

Sampled on 06/30/2020 1343

**EPA 537.1 - EPA Method 537.1**

07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0022	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	13C2-PFDA	100	%		1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	13C2-PFHxA	99	%		1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1

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 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	96	%		1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	116	%		1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	90	%		1

**GAC-6M-20200630 (202006300500)**

**Sampled on 06/30/2020 1346**

**EPA 537.1 - EPA Method 537.1**

07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	13C2-PFDA	97	%		1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	13C2-PFHxA	101	%		1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	107	%		1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	92	%		1

**GAC-7M-20200630 (202006300501)**

**Sampled on 06/30/2020 1349**

**EPA 537.1 - EPA Method 537.1**

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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0025	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	13C2-PFDA	98	%		1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	13C2-PFHxA	98	%		1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	94	%		1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	110	%		1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**GAC-8M-20200630 (202006300502)**

Sampled on 06/30/2020 1352

**EPA 537.1 - EPA Method 537.1**

07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.  
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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	13C2-PFDA	101	%		1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	13C2-PFHxA	100	%		1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	100	%		1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	108	%		1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	94	%		1

**IX-5M-20200630 (202006300503)**

**Sampled on 06/30/2020 1355**

**EPA 537.1 - EPA Method 537.1**

07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0029	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0045	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	13C2-PFDA	103	%		1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	13C2-PFHxA	101	%		1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	97	%		1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	104	%		1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**IX-6M-20200630 (202006300504)**

**Sampled on 06/30/2020 1358**

**EPA 537.1 - EPA Method 537.1**

07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0037	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	13C2-PFDA	106	%		1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	13C2-PFHxA	99	%		1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	95	%		1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	112	%		1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	96	%		1

**IX-7M-20200630 (202006300505)**

Sampled on 06/30/2020 1401

**EPA 537.1 - EPA Method 537.1**

07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0029	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0065	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	13C2-PFDA	100	%		1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	13C2-PFHxA	101	%		1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	105	%		1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**IX-8M-20200630 (202006300506)**

**Sampled on 06/30/2020 1404**

**EPA 537.1 - EPA Method 537.1**

07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0034	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	13C2-PFDA	97	%		1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	13C2-PFHxA	96	%		1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	93	%		1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	113	%		1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	92	%		1

**MB-INF-20200630 (202006300510)**

**Sampled on 06/30/2020 1407**

**SM 5310C - Total Organic Carbon**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	07/07/20 18:32		1260013	(SM 5310C)	Total Organic Carbon	0.76	mg/L	0.30	1
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>									
	07/01/20 03:49		1258690	(EPA 300.0)	Nitrate as Nitrogen by IC	2.3	mg/L	0.50	5
	07/01/20 03:49		1258690	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5
	07/01/20 03:49		1258690	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	07/01/20 03:49		1258690	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.3	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	07/01/20 03:49		1258691	(EPA 300.0)	Chloride	54	mg/L	2.5	5
	07/01/20 03:49		1258691	(EPA 300.0)	Sulfate	79	mg/L	2.5	5
<b>EPA 537.1 - EPA Method 537.1</b>									
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0087	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0031	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0060	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.033	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	13C2-PFDA	94	%		1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	13C2-PFHxA	94	%		1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	87	%		1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	d3-NMEFOSAA	108	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**

Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	97	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	07/02/20 12:40		1259053	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
<b>FB - 20200630 (202006300511)</b>					<b>Sampled on 06/30/2020 1410</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	11-chloroheptacosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	13C2-PFDA	100	%		1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	13C2-PFHxA	103	%		1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	98	%		1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	92	%		1

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**Report:** 878992  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District

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**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1258690**

202006300497 LH-INF-20200630  
 202006300510 MB-INF-20200630

**Analysis Date: 07/01/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1258691**

202006300497 LH-INF-20200630  
 202006300510 MB-INF-20200630

**Analysis Date: 07/01/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**ICP Metals**

**Prep Batch: 1258782 Analytical Batch: 1258807**

202006300497 LH-INF-20200630

**Analysis Date: 07/01/2020**

Analyzed by: NINA

**Alkalinity in CaCO3 units**

**Analytical Batch: 1259053**

202006300510 MB-INF-20200630

**Analysis Date: 07/02/2020**

Analyzed by: ZB2Z

**Perchlorate**

**Analytical Batch: 1259131**

202006300497 LH-INF-20200630

**Analysis Date: 07/02/2020**

Analyzed by: H5VG

**EPA Method 537.1**

**Prep Batch: 1258786 Analytical Batch: 1259138**

202006300488 GAC-1M-20200630  
 202006300489 GAC-2M-20200630  
 202006300490 GAC-3M-20200630  
 202006300491 GAC-4M-20200630  
 202006300492 IX-1M-20200630  
 202006300493 IX-2M-20200630  
 202006300494 IX-3M-20200630  
 202006300495 IX-4M-20200630

**Analysis Date: 07/02/2020**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM

**Total Dissolved Solids (TDS)**

**Prep Batch: 1259222 Analytical Batch: 1259225**

202006300497 LH-INF-20200630

**Analysis Date: 07/02/2020**

Analyzed by: TJ52

**Hexavalent chromium(Dissolved)**

**Analytical Batch: 1259301**

202006300497 LH-INF-20200630

**Analysis Date: 07/02/2020**

Analyzed by: TLH

**Alkalinity in CaCO3 units**

**Analytical Batch: 1259518**

202006300497 LH-INF-20200630

**Analysis Date: 07/06/2020**

Analyzed by: ZB2Z

**Total Suspended Solids (TSS)**

**Analytical Batch: 1259640**

202006300497 LH-INF-20200630

**Analysis Date: 07/06/2020**

Analyzed by: TJ52

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Report: 878992  
Project: 0250000  
Group: WRD Pilot [Set #1]

Water Replenishment District

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**Volatile Organics by GCMS**

**Prep Batch: 1259659 Analytical Batch: 1259663**

202006300497 LH-INF-20200630

**Analysis Date: 07/07/2020**

Analyzed by: TG9W

**EPA Method 537.1**

**Prep Batch: 1259068 Analytical Batch: 1259764**

202006300497 LH-INF-20200630  
202006300498 LH-INF-DUP-20200630  
202006300499 GAC-5M-20200630  
202006300500 GAC-6M-20200630  
202006300501 GAC-7M-20200630  
202006300502 GAC-8M-20200630  
202006300503 IX-5M-20200630  
202006300504 IX-6M-20200630  
202006300505 IX-7M-20200630  
202006300506 IX-8M-20200630  
202006300510 MB-INF-20200630

**Analysis Date: 07/06/2020**

Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM

**ICPMS Metals**

**Prep Batch: 1258782 Analytical Batch: 1259874**

202006300497 LH-INF-20200630

**Analysis Date: 07/08/2020**

Analyzed by: DHX7

**Total Organic Carbon**

**Analytical Batch: 1260013**

202006300497 LH-INF-20200630  
202006300510 MB-INF-20200630

**Analysis Date: 07/07/2020**

Analyzed by: ZS6I  
Analyzed by: ZS6I

**EPA Method 537.1**

**Prep Batch: 1259960 Analytical Batch: 1261159**

202006300511 FB - 20200630

**Analysis Date: 07/10/2020**

Analyzed by: KAM

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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1258690</b>					<b>Analysis Date: 07/01/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.58	mg/L	103	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.58	mg/L	103	(90-110)	20	0.39
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0493	mg/L	99	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0116	mg/L	93	(50-150)		
MS_202006300497	Nitrate as Nitrogen by IC	2.7	13	15.8	mg/L	105	(80-120)		
MS_202006300863	Nitrate as Nitrogen by IC	10	6.5	17.2	mg/L	108	(80-120)		
MSD_202006300497	Nitrate as Nitrogen by IC	2.7	13	15.9	mg/L	106	(80-120)	20	0.63
MSD_202006300863	Nitrate as Nitrogen by IC	10	6.5	17.2	mg/L	108	(80-120)	20	0.20
LCS1	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0506	mg/L	101	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0125	mg/L	100	(50-150)		
MS_202006300497	Nitrite Nitrogen by IC	ND	5	5.10	mg/L	102	(80-120)		
MS_202006300863	Nitrite Nitrogen by IC	ND	2.5	2.58	mg/L	103	(80-120)		
MSD_202006300497	Nitrite Nitrogen by IC	ND	5	5.14	mg/L	103	(80-120)	20	0.74
MSD_202006300863	Nitrite Nitrogen by IC	ND	2.5	2.60	mg/L	104	(80-120)	20	0.54
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1258691</b>					<b>Analysis Date: 07/01/2020</b>				
LCS1	Chloride		25	26.9	mg/L	108	(90-110)		
LCS2	Chloride		25	26.9	mg/L	108	(90-110)	20	0.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.456	mg/L	91	(50-150)		
MS_202006300497	Chloride	100	130	243	mg/L	113	(80-120)		
MSD_202006300497	Chloride	100	130	245	mg/L	115	(80-120)	20	0.87
LCS1	Sulfate		50	52.5	mg/L	105	(90-110)		
LCS2	Sulfate		50	52.6	mg/L	105	(90-110)	20	0.19
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	1.01	mg/L	101	(50-150)		
MRL_W	Sulfate		0.25	0.248	mg/L	99	(50-150)		
MS_202006300497	Sulfate	170	250	444	mg/L	109	(80-120)		
MSD_202006300497	Sulfate	170	250	447	mg/L	110	(80-120)	20	0.56

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.



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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>ICP Metals by EPA 200.7</b>									
<b>Analytical Batch: 1258807</b>					<b>Analysis Date: 07/01/2020</b>				
LCS1	Calcium Total ICAP		50	51.0	mg/L	102	(85-115)		
LCS2	Calcium Total ICAP		50	50.8	mg/L	102	(85-115)	20	0.39
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.999	mg/L	100	(50-150)		
MS_202006290087	Calcium Total ICAP	1.1	50	51.8	mg/L	101	(70-130)		
MS2_202006300300	Calcium Total ICAP	15	50	64.6	mg/L	100	(70-130)		
MSD_202006290087	Calcium Total ICAP	1.1	50	51.2	mg/L	100	(70-130)	20	1.2
MSD2_202006300300	Calcium Total ICAP	15	50	64.3	mg/L	99	(70-130)	20	0.45
LCS1	Iron Total ICAP		5	5.12	mg/L	102	(85-115)		
LCS2	Iron Total ICAP		5	5.10	mg/L	102	(85-115)	20	0.39
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0211	mg/L	106	(50-150)		
MS_202006290087	Iron Total ICAP	ND	5	5.08	mg/L	102	(70-130)		
MS2_202006300300	Iron Total ICAP	ND	5	5.04	mg/L	101	(70-130)		
MSD_202006290087	Iron Total ICAP	ND	5	5.05	mg/L	101	(70-130)	20	0.63
MSD2_202006300300	Iron Total ICAP	ND	5	5.05	mg/L	101	(70-130)	20	0.18
LCS1	Magnesium Total ICAP		20	20.4	mg/L	102	(85-115)		
LCS2	Magnesium Total ICAP		20	20.3	mg/L	102	(85-115)	20	0.49
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0957	mg/L	96	(50-150)		
MS_202006290087	Magnesium Total ICAP	0.24	20	20.6	mg/L	102	(70-130)		
MS2_202006300300	Magnesium Total ICAP	2.2	20	22.3	mg/L	101	(70-130)		
MSD_202006290087	Magnesium Total ICAP	0.24	20	20.4	mg/L	101	(70-130)	20	0.75
MSD2_202006300300	Magnesium Total ICAP	2.2	20	22.4	mg/L	101	(70-130)	20	0.52
LCS1	Potassium Total ICAP		20	20.6	mg/L	103	(85-115)		
LCS2	Potassium Total ICAP		20	20.6	mg/L	103	(85-115)	20	0.0
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.698	mg/L	70	(50-150)		
MS_202006290087	Potassium Total ICAP	ND	20	21.0	mg/L	105	(70-130)		
MS2_202006300300	Potassium Total ICAP	ND	20	21.9	mg/L	106	(70-130)		
MSD_202006290087	Potassium Total ICAP	ND	20	20.8	mg/L	104	(70-130)	20	0.27
MSD2_202006300300	Potassium Total ICAP	ND	20	22.0	mg/L	107	(70-130)	20	0.83
LCS1	Sodium Total ICAP		50	50.5	mg/L	101	(85-115)		
LCS2	Sodium Total ICAP		50	50.3	mg/L	101	(85-115)	20	0.40
MBLK	Sodium Total ICAP			<0.5	mg/L				

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Sodium Total ICAP		1	0.804	mg/L	80	(50-150)		
MS_202006290087	Sodium Total ICAP	1.8	50	51.8	mg/L	100	(70-130)		
MS2_202006300300	Sodium Total ICAP	15	50	63.5	mg/L	96	(70-130)		
MSD_202006290087	Sodium Total ICAP	1.8	50	51.6	mg/L	100	(70-130)	20	0.46
MSD2_202006300300	Sodium Total ICAP	15	50	64.3	mg/L	98	(70-130)	20	1.2

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1259053

Analysis Date: 07/02/2020

LCS1	Alkalinity in CaCO3 units		100	105	mg/L	105	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.8	mg/L	100	(90-110)	20	5.1
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.91	mg/L	96	(50-150)		
MS_202007010354	Alkalinity in CaCO3 units	150	100	285	mg/L	111	(80-120)		
MS_202007010679	Alkalinity in CaCO3 units	250	100	321	mg/L	<u>74</u>	(80-120)		
MSD_202007010354	Alkalinity in CaCO3 units	150	100	176	mg/L	<u>1.9</u>	(80-120)	20	<u>47</u>
MSD_202007010679	Alkalinity in CaCO3 units	250	100	314	mg/L	<u>67</u>	(80-120)	20	2.1

Perchlorate by EPA 314.0

Analytical Batch: 1259131

Analysis Date: 07/02/2020

LCS1	Perchlorate		25	24.5	ug/L	98	(85-115)		
LCS2	Perchlorate		25	24.7	ug/L	99	(85-115)	15	0.81
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	4.02	ug/L	101	(75-125)		
MS_202006300281	Perchlorate	ND	25	21.9	ug/L	88	(80-120)		
MSD_202006300281	Perchlorate	ND	25	21.9	ug/L	88	(80-120)	15	0.16

EPA Method 537.1 by EPA 537.1

Prep Batch: 1258786 Analytical Batch: 1259138

Analysis Date: 07/02/2020

DUP_202006300494	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0427	ug/L	91	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0503	ug/L	107	(70-130)	30	16
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00201	ug/L	107	(50-150)		
MS1_202006300488	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0221	ug/L	94	(70-130)		
DUP_202006300494	13C2-PFDA (S)			109	%	109	(70-130)		
LCS3	13C2-PFDA (S)		100	102	%	102	(70-130)		
LCS4	13C2-PFDA (S)		100	103	%	103	(70-130)		
MBLK	13C2-PFDA (S)			103	%	103	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	101	%	101	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202006300488	13C2-PFDA (S)		100	101	%	101	(70-130)		
DUP_202006300494	13C2-PFHxA (S)			108	%	108	(70-130)		
LCS3	13C2-PFHxA (S)		100	101	%	101	(70-130)		
LCS4	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFHxA (S)			105	%	105	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	103	%	103	(70-130)		
MS1_202006300488	13C2-PFHxA (S)		100	102	%	102	(70-130)		
DUP_202006300494	13C2-PFOA- IS#1 (I)			91.6	%	92	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	99.0	%	99	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MS1_202006300488	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
DUP_202006300494	13C3-HFPO-DA (S)			102	%	102	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	99.8	%	100	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	97.8	%	98	(70-130)		
MBLK	13C3-HFPO-DA (S)			100	%	100	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	97.9	%	98	(70-130)		
MS1_202006300488	13C3-HFPO-DA (S)		100	99.5	%	100	(70-130)		
DUP_202006300494	13C4-PFOS- IS#2 (I)			87.2	%	87	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	93.1	%	93	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			94.0	%	94	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	93.5	%	93	(50-150)		
MS1_202006300488	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
DUP_202006300494	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0458	ug/L	94	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0468	ug/L	97	(70-130)	30	2.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00192	ug/L	102	(50-150)		
MS1_202006300488	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0245	ug/L	104	(70-130)		
DUP_202006300494	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0461	ug/L	99	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0470	ug/L	101	(70-130)	30	1.9
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00191	ug/L	103	(50-150)		
MS1_202006300488	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0240	ug/L	103	(70-130)		
DUP_202006300494	d3-NMeFOSAA (I)			95.9	%	96	(50-150)		

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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	99.8	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			100	%	101	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
MS1_202006300488	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
DUP_202006300494	d5-NEtFOSAA (S)			104	%	104	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	95.6	%	96	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	98.8	%	99	(70-130)		
MBLK	d5-NEtFOSAA (S)			102	%	102	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	99.1	%	99	(70-130)		
MS1_202006300488	d5-NEtFOSAA (S)		100	98.2	%	98	(70-130)		
DUP_202006300494	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0471	ug/L	94	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0466	ug/L	93	(70-130)	30	1.1
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00184	ug/L	92	(50-150)		
MS1_202006300488	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0240	ug/L	96	(70-130)		
DUP_202006300494	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0468	ug/L	94	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0485	ug/L	97	(70-130)	30	3.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00202	ug/L	101	(50-150)		
MS1_202006300488	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0252	ug/L	101	(70-130)		
DUP_202006300494	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0471	ug/L	94	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0484	ug/L	97	(70-130)	30	2.7
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00198	ug/L	99	(50-150)		
MS1_202006300488	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0259	ug/L	104	(70-130)		
DUP_202006300494	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0440	ug/L	99	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0413	ug/L	93	(70-130)	30	6.3
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00179	ug/L	101	(50-150)		
MS1_202006300488	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0233	ug/L	105	(70-130)		
DUP_202006300494	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0483	ug/L	97	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0496	ug/L	99	(70-130)	30	2.7

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00197	ug/L	98	(50-150)		
MS1_202006300488	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0245	ug/L	98	(70-130)		
DUP_202006300494	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0528	ug/L	106	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0512	ug/L	102	(70-130)	30	3.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00209	ug/L	104	(50-150)		
MS1_202006300488	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0273	ug/L	109	(70-130)		
DUP_202006300494	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0480	ug/L	96	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0527	ug/L	105	(70-130)	30	9.3
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00216	ug/L	108	(50-150)		
MS1_202006300488	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0258	ug/L	103	(70-130)		
DUP_202006300494	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0462	ug/L	101	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0477	ug/L	105	(70-130)	30	3.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00192	ug/L	105	(50-150)		
MS1_202006300488	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0248	ug/L	109	(70-130)		
DUP_202006300494	Perfluorohexanoic acid (PFHxA)	0.0022		0.00227	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0491	ug/L	98	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0492	ug/L	99	(70-130)	30	0.20
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00210	ug/L	105	(50-150)		
MS1_202006300488	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0264	ug/L	105	(70-130)		
DUP_202006300494	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0507	ug/L	101	(70-130)	30	2.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00221	ug/L	110	(50-150)		
MS1_202006300488	Perfluorononanoic acid (PFNA)	ND	0.025	0.0256	ug/L	102	(70-130)		
DUP_202006300494	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0470	ug/L	102	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0459	ug/L	99	(70-130)	30	2.4
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00198	ug/L	107	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 878992  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202006300488	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0250	ug/L	108	(70-130)		
DUP_202006300494	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0503	ug/L	101	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0508	ug/L	102	(70-130)	30	0.99
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00218	ug/L	109	(50-150)		
MS1_202006300488	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0262	ug/L	104	(70-130)		
DUP_202006300494	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0584	ug/L	117	(70-130)	30	9.3
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00250	ug/L	125	(50-150)		
MS1_202006300488	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0267	ug/L	105	(70-130)		
DUP_202006300494	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0528	ug/L	106	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0519	ug/L	104	(70-130)	30	1.7
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202006300488	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0261	ug/L	104	(70-130)		
DUP_202006300494	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0489	ug/L	98	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0495	ug/L	99	(70-130)	30	1.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00207	ug/L	104	(50-150)		
MS1_202006300488	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0251	ug/L	100	(70-130)		

**Total Dissolved Solids (TDS) by E160.1/SM2540C**

Analytical Batch: 1259225

Analysis Date: 07/02/2020

DUP_202005260429	Total Dissolved Solid (TDS)	480		476	mg/L		(0-10)	10	0.84
DUP_202006300497	Total Dissolved Solid (TDS)	650		640	mg/L		(0-10)	10	2.2
LCS1	Total Dissolved Solid (TDS)		175	176	mg/L	101	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	686	mg/L	98	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	13.0	mg/L	130	(50-150)		

**Hexavalent chromium(Dissolved) by EPA 218.6**

Analytical Batch: 1259301

Analysis Date: 07/02/2020

LCS1	Hexavalent chromium(Dissolved)		2	2.01	ug/L	101	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	2.00	ug/L	100	(90-110)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0189	ug/L	95	(50-150)		
MS_202006250224	Hexavalent chromium(Dissolved)	ND	2	2.14	ug/L	106	(90-110)		
MS_202007030017	Hexavalent chromium(Dissolved)	0.24	2	2.38	ug/L	107	(90-110)		
MSD_202006250224	Hexavalent chromium(Dissolved)	ND	2	2.14	ug/L	106	(90-110)	20	0.17
MSD_202007030017	Hexavalent chromium(Dissolved)	0.24	2	2.38	ug/L	107	(90-110)	20	0.013

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1259518

Analysis Date: 07/06/2020

LCS1	Alkalinity in CaCO3 units		100	101	mg/L	101	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.6	mg/L	100	(90-110)	20	1.4
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.08	mg/L	104	(50-150)		
MS_202007020043	Alkalinity in CaCO3 units	43	100	141	mg/L	98	(80-120)		
MS_202007020308	Alkalinity in CaCO3 units	130	100	233	mg/L	101	(80-120)		
MSD_202007020043	Alkalinity in CaCO3 units	43	100	140	mg/L	98	(80-120)	20	0.29
MSD_202007020308	Alkalinity in CaCO3 units	130	100	232	mg/L	100	(80-120)	20	0.21

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1259640

Analysis Date: 07/06/2020

DUP_202005270057	Total Suspended Solids (TSS)	300		302	mg/L		(0-10)	10	0.66
DUP_202005270094	Total Suspended Solids (TSS)	50		46.0	mg/L		(0-10)	10	8.3
LCS1	Total Suspended Solids (TSS)		175	162	mg/L	93	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	170	mg/L	97	(71-107)	20	4.8
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	9.00	mg/L	90	(50-150)		

Volatile Organics by GCMS by EPA 524.2

Analytical Batch: 1259663

Analysis Date: 07/06/2020

LCS1	1,1,1,2-Tetrachloroethane		5	5.76	ug/L	115	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	5.68	ug/L	114	(70-130)	20	1.4
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.81	ug/L	96	(70-130)		
LCS2	1,1,1-Trichloroethane		5	5.85	ug/L	117	(70-130)	20	20
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.45	ug/L	109	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	5.65	ug/L	113	(70-130)	20	3.6

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.590	ug/L	118	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.98	ug/L	100	(70-130)		
LCS2	1,1,2-Trichloroethane		5	5.14	ug/L	103	(70-130)	20	3.2
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,1-Dichloroethane		5	5.11	ug/L	102	(70-130)		
LCS2	1,1-Dichloroethane		5	4.94	ug/L	99	(70-130)	20	3.4
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.620	ug/L	124	(50-150)		
LCS1	1,1-Dichloroethylene		5	5.17	ug/L	103	(70-130)		
LCS2	1,1-Dichloroethylene		5	4.97	ug/L	99	(70-130)	20	3.9
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.680	ug/L	136	(50-150)		
LCS1	1,1-Dichloropropene		5	4.86	ug/L	97	(70-130)		
LCS2	1,1-Dichloropropene		5	5.52	ug/L	110	(70-130)	20	13
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.600	ug/L	120	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	5.22	ug/L	104	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	5.41	ug/L	108	(70-130)	20	3.6
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.15	ug/L	103	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.47	ug/L	109	(70-130)	20	6.0
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.600	ug/L	120	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	5.13	ug/L	103	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	5.27	ug/L	105	(70-130)	20	2.7
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	5.06	ug/L	101	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	5.31	ug/L	106	(70-130)	20	4.8
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,2-Dichloroethane		5	5.31	ug/L	106	(70-130)		
LCS2	1,2-Dichloroethane		5	5.33	ug/L	107	(70-130)	20	0.38
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.560	ug/L	112	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 878992  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	112	%	112	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			91.4	%	91	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	104	%	104	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
LCS1	1,2-Dichloropropane		5	5.07	ug/L	101	(70-130)		
LCS2	1,2-Dichloropropane		5	5.15	ug/L	103	(70-130)	20	1.6
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.91	ug/L	98	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	5.11	ug/L	102	(70-130)	20	4.0
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,3-Dichloropropane		5	4.98	ug/L	100	(70-130)		
LCS2	1,3-Dichloropropane		5	5.08	ug/L	102	(70-130)	20	2.0
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.510	ug/L	102	(50-150)		
LCS1	2,2-Dichloropropane		5	5.08	ug/L	102	(70-130)		
LCS2	2,2-Dichloropropane		5	5.00	ug/L	100	(70-130)	20	1.6
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.520	ug/L	104	(50-150)		
LCS1	2-Butanone (MEK)		50	51.4	ug/L	103	(70-130)		
LCS2	2-Butanone (MEK)		50	49.9	ug/L	100	(70-130)	20	3.0
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.48	ug/L	110	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	102	%	102	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	100	%	100	(70-130)		
MBLK	4-Bromofluorobenzene (S)			96.4	%	96	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	104	%	104	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	101	%	101	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	52.4	ug/L	105	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	58.4	ug/L	117	(70-130)	20	11
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.72	ug/L	94	(50-150)		
LCS1	Benzene		5	5.14	ug/L	103	(70-130)		
LCS2	Benzene		5	5.71	ug/L	114	(70-130)	20	11
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.570	ug/L	114	(50-150)		

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 878992  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Bromobenzene		5	5.34	ug/L	107	(70-130)		
LCS2	Bromobenzene		5	5.38	ug/L	108	(70-130)	20	0.75
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.580	ug/L	116	(50-150)		
LCS1	Bromochloromethane		5	4.85	ug/L	97	(70-130)		
LCS2	Bromochloromethane		5	5.62	ug/L	112	(70-130)	20	15
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.610	ug/L	122	(50-150)		
LCS1	Bromodichloromethane		5	5.19	ug/L	104	(70-130)		
LCS2	Bromodichloromethane		5	4.97	ug/L	99	(70-130)	20	4.3
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	Bromoethane		5	4.91	ug/L	98	(70-130)		
LCS2	Bromoethane		5	4.86	ug/L	97	(70-130)	20	1.0
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.640	ug/L	128	(50-150)		
LCS1	Bromoform		5	5.44	ug/L	109	(70-130)		
LCS2	Bromoform		5	4.83	ug/L	97	(70-130)	20	12
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.550	ug/L	110	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.21	ug/L	104	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.19	ug/L	104	(70-130)	20	0.39
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.650	ug/L	130	(50-150)		
LCS1	Carbon disulfide		5	5.29	ug/L	106	(70-130)		
LCS2	Carbon disulfide		5	5.04	ug/L	101	(70-130)	20	4.8
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.580	ug/L	116	(50-150)		
LCS1	Carbon Tetrachloride		5	5.09	ug/L	102	(70-130)		
LCS2	Carbon Tetrachloride		5	6.28	ug/L	126	(70-130)	20	<u>21</u>
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.560	ug/L	112	(50-150)		
LCS1	Chlorobenzene		5	5.10	ug/L	102	(70-130)		
LCS2	Chlorobenzene		5	5.11	ug/L	102	(70-130)	20	0.20
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.540	ug/L	108	(50-150)		
LCS1	Chlorodibromomethane		5	5.67	ug/L	113	(70-130)		
LCS2	Chlorodibromomethane		5	5.29	ug/L	106	(70-130)	20	6.9

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 878992  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	Chloroethane		5	5.40	ug/L	108	(70-130)		
LCS2	Chloroethane		5	5.05	ug/L	101	(70-130)	20	6.7
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.730	ug/L	146	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.81	ug/L	96	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	5.22	ug/L	104	(70-130)	20	8.2
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.600	ug/L	120	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	5.02	ug/L	100	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.53	ug/L	91	(70-130)	20	10
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.720	ug/L	144	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	5.02	ug/L	100	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.98	ug/L	100	(70-130)	20	0.80
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.640	ug/L	128	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	5.30	ug/L	106	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	5.20	ug/L	104	(70-130)	20	1.9
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.430	ug/L	86	(50-150)		
LCS1	Dibromomethane		5	4.98	ug/L	100	(70-130)		
LCS2	Dibromomethane		5	5.03	ug/L	101	(70-130)	20	1
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	Dichlorodifluoromethane		5	5.39	ug/L	108	(70-130)		
LCS2	Dichlorodifluoromethane		5	5.37	ug/L	107	(70-130)	20	0.37
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.730	ug/L	146	(50-150)		
LCS1	Dichloromethane		5	5.28	ug/L	106	(70-130)		
LCS2	Dichloromethane		5	5.13	ug/L	103	(70-130)	20	2.9
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.630	ug/L	126	(50-150)		
LCS1	Di-isopropyl ether		5	5.46	ug/L	109	(70-130)		
LCS2	Di-isopropyl ether		5	4.95	ug/L	99	(70-130)	20	9.8
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.630	ug/L	126	(50-150)		

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Report: 878992  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Ethyl benzene		5	5.14	ug/L	103	(70-130)		
LCS2	Ethyl benzene		5	5.17	ug/L	103	(70-130)	20	0.58
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.530	ug/L	106	(50-150)		
LCS1	Hexachlorobutadiene		5	5.21	ug/L	104	(70-130)		
LCS2	Hexachlorobutadiene		5	5.43	ug/L	109	(70-130)	20	4.1
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.550	ug/L	110	(50-150)		
LCS1	Isopropylbenzene		5	5.07	ug/L	101	(70-130)		
LCS2	Isopropylbenzene		5	5.25	ug/L	105	(70-130)	20	3.5
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.560	ug/L	112	(50-150)		
LCS1	m,p-Xylenes		10	10.2	ug/L	102	(70-130)		
LCS2	m,p-Xylenes		10	10.2	ug/L	102	(70-130)	20	0.0
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	1.01	ug/L	101	(50-150)		
MRLLW	m,p-Xylenes		0.5	0.540	ug/L	108	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	5.39	ug/L	108	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	5.43	ug/L	109	(70-130)	20	0.74
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.590	ug/L	118	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	5.28	ug/L	106	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	5.08	ug/L	102	(70-130)	20	3.9
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.630	ug/L	126	(50-150)		
LCS1	Naphthalene		5	5.34	ug/L	107	(70-130)		
LCS2	Naphthalene		5	5.48	ug/L	110	(70-130)	20	2.6
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.460	ug/L	92	(50-150)		
LCS1	n-Butylbenzene		5	5.04	ug/L	101	(70-130)		
LCS2	n-Butylbenzene		5	5.17	ug/L	103	(70-130)	20	2.5
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.520	ug/L	104	(50-150)		
LCS1	n-Propylbenzene		5	5.23	ug/L	105	(70-130)		
LCS2	n-Propylbenzene		5	5.37	ug/L	107	(70-130)	20	2.6
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.580	ug/L	116	(50-150)		
LCS1	o-Chlorotoluene		5	5.31	ug/L	106	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	o-Chlorotoluene		5	5.46	ug/L	109	(70-130)	20	2.8
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.590	ug/L	118	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	5.21	ug/L	104	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	5.40	ug/L	108	(70-130)	20	3.6
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.550	ug/L	110	(50-150)		
LCS1	o-Xylene		5	5.16	ug/L	103	(70-130)		
LCS2	o-Xylene		5	5.16	ug/L	103	(70-130)	20	0.0
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.520	ug/L	104	(50-150)		
LCS1	p-Chlorotoluene		5	5.23	ug/L	105	(70-130)		
LCS2	p-Chlorotoluene		5	5.30	ug/L	106	(70-130)	20	1.3
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.550	ug/L	110	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	5.32	ug/L	106	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.42	ug/L	108	(70-130)	20	1.9
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.620	ug/L	124	(50-150)		
LCS1	p-Isopropyltoluene		5	5.17	ug/L	103	(70-130)		
LCS2	p-Isopropyltoluene		5	5.36	ug/L	107	(70-130)	20	3.6
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.530	ug/L	106	(50-150)		
LCS1	sec-Butylbenzene		5	5.49	ug/L	110	(70-130)		
LCS2	sec-Butylbenzene		5	5.68	ug/L	114	(70-130)	20	3.4
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.560	ug/L	112	(50-150)		
LCS1	Styrene		5	5.13	ug/L	103	(70-130)		
LCS2	Styrene		5	5.14	ug/L	103	(70-130)	20	0.20
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.450	ug/L	90	(50-150)		
LCS1	tert-amyl Methyl Ether		5	5.35	ug/L	107	(70-130)		
LCS2	tert-amyl Methyl Ether		5	5.73	ug/L	115	(70-130)	20	6.9
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.530	ug/L	106	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	5.54	ug/L	111	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	5.27	ug/L	105	(70-130)	20	5.0
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 878992  
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 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.590	ug/L	118	(50-150)		
LCS1	tert-Butylbenzene		5	5.05	ug/L	101	(70-130)		
LCS2	tert-Butylbenzene		5	5.23	ug/L	105	(70-130)	20	3.5
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.550	ug/L	110	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.94	ug/L	99	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.89	ug/L	98	(70-130)	20	1.0
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.610	ug/L	122	(50-150)		
LCS1	Toluene		5	5.00	ug/L	100	(70-130)		
LCS2	Toluene		5	4.97	ug/L	99	(70-130)	20	0.60
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.560	ug/L	112	(50-150)		
LCS1	Toluene-d8 (S)		5	97.6	%	98	(70-130)		
LCS2	Toluene-d8 (S)		5	96.8	%	97	(70-130)		
MBLK	Toluene-d8 (S)			86.0	%	86	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	96.4	%	96	(70-130)		
MRLW	Toluene-d8 (S)		5	94.0	%	94	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	5.51	ug/L	110	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	5.44	ug/L	109	(70-130)	20	1.3
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.610	ug/L	122	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	5.05	ug/L	101	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.91	ug/L	98	(70-130)	20	2.8
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.400	ug/L	80	(50-150)		
LCS1	Trichloroethylene (TCE)		5	5.03	ug/L	101	(70-130)		
LCS2	Trichloroethylene (TCE)		5	5.07	ug/L	101	(70-130)	20	0.79
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.570	ug/L	114	(50-150)		
LCS1	Trichlorofluoromethane		5	5.14	ug/L	103	(70-130)		
LCS2	Trichlorofluoromethane		5	5.05	ug/L	101	(70-130)	20	1.8
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.720	ug/L	144	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	5.09	ug/L	102	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	4.87	ug/L	97	(70-130)	20	4.4
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.700	ug/L	140	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Vinyl chloride (VC)		5	5.30	ug/L	106	(70-130)		
LCS2	Vinyl chloride (VC)		5	5.01	ug/L	100	(70-130)	20	5.6
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.720	ug/L	144	(50-150)		
MRLLLW	Vinyl chloride (VC)		0.25	0.360	ug/L	144	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1259068 Analytical Batch: 1259764

Analysis Date: 07/06/2020

DUP_202006300506	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0229	ug/L	97	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0232	ug/L	99	(70-130)	30	1.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00182	ug/L	97	(50-150)		
MS_202006300497	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00174	ug/L	93	(50-150)		
DUP_202006300506	13C2-PFDA (S)			94.0	%	94	(70-130)		
LCS1	13C2-PFDA (S)		100	97.4	%	97	(70-130)		
LCS2	13C2-PFDA (S)		100	94.4	%	94	(70-130)		
MBLK	13C2-PFDA (S)			99.2	%	99	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	99.8	%	100	(70-130)		
MS_202006300497	13C2-PFDA (S)		100	93.1	%	93	(70-130)		
DUP_202006300506	13C2-PFHxA (S)			94.9	%	95	(70-130)		
LCS1	13C2-PFHxA (S)		100	97.4	%	97	(70-130)		
LCS2	13C2-PFHxA (S)		100	96.8	%	97	(70-130)		
MBLK	13C2-PFHxA (S)			97.0	%	97	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	99.0	%	99	(70-130)		
MS_202006300497	13C2-PFHxA (S)		100	92.2	%	92	(70-130)		
DUP_202006300506	13C2-PFOA- IS#1 (I)			113	%	113	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			110	%	110	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS_202006300497	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
DUP_202006300506	13C3-HFPO-DA (S)			89.5	%	90	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	95.6	%	96	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	93.4	%	93	(70-130)		
MBLK	13C3-HFPO-DA (S)			94.3	%	94	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	95.7	%	96	(70-130)		
MS_202006300497	13C3-HFPO-DA (S)		100	88.9	%	89	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202006300506	13C4-PFOS- IS#2 (I)			108	%	109	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
MS_202006300497	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
DUP_202006300506	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0235	ug/L	99	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0236	ug/L	100	(70-130)	30	0.43
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00198	ug/L	105	(50-150)		
MS_202006300497	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00179	ug/L	95	(50-150)		
DUP_202006300506	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0237	ug/L	102	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0234	ug/L	100	(70-130)	30	1.3
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00188	ug/L	101	(50-150)		
MS_202006300497	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00176	ug/L	95	(50-150)		
DUP_202006300506	d3-NMeFOSAA (I)			117	%	117	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	110	%	111	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
MBLK	d3-NMeFOSAA (I)			112	%	112	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
MS_202006300497	d3-NMeFOSAA (I)		100	112	%	112	(50-150)		
DUP_202006300506	d5-NEtFOSAA (S)			94.3	%	94	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	91.5	%	91	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	92.0	%	92	(70-130)		
MBLK	d5-NEtFOSAA (S)			97.1	%	97	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	93.7	%	94	(70-130)		
MS_202006300497	d5-NEtFOSAA (S)		100	91.9	%	92	(70-130)		
DUP_202006300506	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0236	ug/L	95	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0238	ug/L	95	(70-130)	30	0.42
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00195	ug/L	98	(50-150)		
MS_202006300497	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00181	ug/L	91	(50-150)		
DUP_202006300506	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0237	ug/L	95	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0240	ug/L	96	(70-130)	30	1.3
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00202	ug/L	101	(50-150)		
MS_202006300497	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00194	ug/L	97	(50-150)		
DUP_202006300506	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0238	ug/L	95	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0240	ug/L	96	(70-130)	30	0.84
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00204	ug/L	102	(50-150)		
MS_202006300497	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00190	ug/L	95	(50-150)		
DUP_202006300506	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0222	ug/L	100	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0222	ug/L	100	(70-130)	30	0.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00179	ug/L	101	(50-150)		
MS_202006300497	Perfluorobutanesulfonic acid (PFBS)	0.0060	0.0018	0.00760	ug/L	92	(50-150)		
DUP_202006300506	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0250	ug/L	100	(70-130)	30	0.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00211	ug/L	105	(50-150)		
MS_202006300497	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00277	ug/L	89	(50-150)		
DUP_202006300506	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0264	ug/L	106	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0257	ug/L	103	(70-130)	30	2.7
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00217	ug/L	109	(50-150)		
MS_202006300497	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00187	ug/L	94	(50-150)		
DUP_202006300506	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0261	ug/L	104	(70-130)	30	2.7
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202006300497	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00379	ug/L	100	(50-150)		
DUP_202006300506	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0236	ug/L	103	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0231	ug/L	101	(70-130)	30	2.1
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00189	ug/L	103	(50-150)		
MS_202006300497	Perfluorohexanesulfonic acid (PFHxS)	0.0063	0.0018	0.00816	ug/L	102	(50-150)		
DUP_202006300506	Perfluorohexanoic acid (PFHxA)	0.0034		0.00291	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0258	ug/L	103	(70-130)	30	3.1
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00209	ug/L	104	(50-150)		
MS_202006300497	Perfluorohexanoic acid (PFHxA)	0.0033	0.002	0.00507	ug/L	90	(50-150)		
DUP_202006300506	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0247	ug/L	99	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0251	ug/L	100	(70-130)	30	1.6
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202006300497	Perfluorononanoic acid (PFNA)	0.0029	0.002	0.00464	ug/L	88	(50-150)		
DUP_202006300506	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0232	ug/L	100	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0230	ug/L	100	(70-130)	30	0.43
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00195	ug/L	105	(50-150)		
MS_202006300497	Perfluorooctanesulfonic acid (PFOS)	0.031	0.0019	0.0324	ug/L	83	(50-150)		
DUP_202006300506	Perfluorooctanoic acid (PFOA)	0.0034		0.00291	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0251	ug/L	100	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0256	ug/L	102	(70-130)	30	2.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202006300497	Perfluorooctanoic acid (PFOA)	0.012	0.002	0.0137	ug/L	78	(50-150)		
DUP_202006300506	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0271	ug/L	108	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0274	ug/L	110	(70-130)	30	1.5
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00256	ug/L	128	(50-150)		
MS_202006300497	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00284	ug/L	107	(50-150)		
DUP_202006300506	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0251	ug/L	100	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0243	ug/L	97	(70-130)	30	3.2
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00209	ug/L	105	(50-150)		
MS_202006300497	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00184	ug/L	92	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202006300506	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0237	ug/L	95	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0251	ug/L	100	(70-130)	30	5.7
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00209	ug/L	104	(50-150)		
MS_202006300497	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00188	ug/L	94	(50-150)		

ICPMS Metals by EPA 200.8

Analytical Batch: 1259874

Analysis Date: 07/08/2020

LCS1	Arsenic Total ICAP/MS		50	53.8	ug/L	108	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	52.9	ug/L	106	(85-115)	20	1.7
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.09	ug/L	109	(50-150)		
MS_202006180116	Arsenic Total ICAP/MS	ND	50	55.4	ug/L	111	(70-130)		
MS2_202007010413	Arsenic Total ICAP/MS	2.8	50	58.9	ug/L	112	(70-130)		
MSD_202006180116	Arsenic Total ICAP/MS	ND	50	56.6	ug/L	113	(70-130)	20	2.1
MSD2_202007010413	Arsenic Total ICAP/MS	2.8	50	59.2	ug/L	113	(70-130)	20	0.46
LCS1	Manganese Total ICAP/MS		100	105	ug/L	105	(85-115)		
LCS2	Manganese Total ICAP/MS		100	102	ug/L	103	(85-115)	20	1.9
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.13	ug/L	106	(50-150)		
MS_202006180116	Manganese Total ICAP/MS	ND	100	103	ug/L	103	(70-130)		
MS2_202007010413	Manganese Total ICAP/MS	ND	100	100	ug/L	100	(70-130)		
MSD_202006180116	Manganese Total ICAP/MS	ND	100	106	ug/L	106	(70-130)	20	3.0
MSD2_202007010413	Manganese Total ICAP/MS	ND	100	100	ug/L	99	(70-130)	20	0.045
LCS1	Uranium ICAP/MS		50	51.1	ug/L	102	(85-115)		
LCS2	Uranium ICAP/MS		50	50.2	ug/L	100	(85-115)	20	1.8
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.989	ug/L	99	(50-150)		
MS_202006180116	Uranium ICAP/MS	ND	50	50.7	ug/L	101	(70-130)		
MS2_202007010413	Uranium ICAP/MS	3	50	58.2	ug/L	110	(70-130)		
MSD_202006180116	Uranium ICAP/MS	ND	50	51.7	ug/L	103	(70-130)	20	1.9
MSD2_202007010413	Uranium ICAP/MS	3	50	58.4	ug/L	111	(70-130)	20	0.40

Total Organic Carbon by SM 5310C

Analytical Batch: 1260013

Analysis Date: 07/07/2020

LCS1	Total Organic Carbon		5	4.81	mg/L	96	(90-110)		
LCS2	Total Organic Carbon		5	4.75	mg/L	95	(90-110)	20	1.3
MBLK	Total Organic Carbon			<0.15	mg/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Total Organic Carbon		0.2	0.226	mg/L	113	(50-150)		
MS_202006300497	Total Organic Carbon	0.69	4	4.47	mg/L	95	(80-120)		
MS2_202007010646	Total Organic Carbon	ND	2	2.04	mg/L	96	(80-120)		
MSD_202006300497	Total Organic Carbon	0.69	4	4.55	mg/L	96	(80-120)	20	1.8
MSD2_202007010646	Total Organic Carbon	ND	2	2.01	mg/L	95	(80-120)	20	1.7

EPA Method 537.1 by EPA 537.1

Prep Batch: 1259960 Analytical Batch: 1261159

Analysis Date: 07/10/2020

DUP_202007070505	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0465	ug/L	99	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0500	ug/L	106	(70-130)	30	7.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00210	ug/L	112	(50-150)		
MS1_202007070504	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0236	ug/L	100	(70-130)		
DUP_202007070505	13C2-PFDA (S)			93.2	%	93	(70-130)		
LCS3	13C2-PFDA (S)		100	90.6	%	91	(70-130)		
LCS4	13C2-PFDA (S)		100	93.7	%	94	(70-130)		
MBLK	13C2-PFDA (S)			96.0	%	96	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	93.9	%	94	(70-130)		
MS1_202007070504	13C2-PFDA (S)		100	94.1	%	94	(70-130)		
DUP_202007070505	13C2-PFHxA (S)			105	%	105	(70-130)		
LCS3	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS4	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFHxA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	109	%	109	(70-130)		
MS1_202007070504	13C2-PFHxA (S)		100	106	%	106	(70-130)		
DUP_202007070505	13C2-PFOA- IS#1 (I)			100	%	100	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.0	%	98	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	98.8	%	99	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			98.7	%	99	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MS1_202007070504	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
DUP_202007070505	13C3-HFPO-DA (S)			96.3	%	96	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	96.3	%	96	(70-130)		
MBLK	13C3-HFPO-DA (S)			98.1	%	98	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	98.2	%	98	(70-130)		
MS1_202007070504	13C3-HFPO-DA (S)		100	97.0	%	97	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 878992  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007070505	13C4-PFOS- IS#2 (I)			92.6	%	93	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	93.4	%	93	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	94.5	%	94	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			96.0	%	96	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	94.3	%	94	(50-150)		
MS1_202007070504	13C4-PFOS- IS#2 (I)		100	98.3	%	98	(50-150)		
DUP_202007070505	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0492	ug/L	101	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0497	ug/L	102	(70-130)	30	1.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00232	ug/L	123	(50-150)		
MS1_202007070504	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0265	ug/L	112	(70-130)		
DUP_202007070505	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0450	ug/L	97	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0472	ug/L	101	(70-130)	30	4.8
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00205	ug/L	110	(50-150)		
MS1_202007070504	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0232	ug/L	100	(70-130)		
DUP_202007070505	d3-NMeFOSAA (I)			96.3	%	96	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	95.5	%	95	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	98.1	%	98	(50-150)		
MBLK	d3-NMeFOSAA (I)			99.3	%	99	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
MS1_202007070504	d3-NMeFOSAA (I)		100	97.8	%	98	(50-150)		
DUP_202007070505	d5-NEtFOSAA (S)			95.9	%	96	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	90.3	%	90	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	91.6	%	92	(70-130)		
MBLK	d5-NEtFOSAA (S)			90.6	%	91	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	90.1	%	90	(70-130)		
MS1_202007070504	d5-NEtFOSAA (S)		100	93.9	%	94	(70-130)		
DUP_202007070505	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0510	ug/L	102	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0499	ug/L	100	(70-130)	30	2.2
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00227	ug/L	114	(50-150)		
MS1_202007070504	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0256	ug/L	102	(70-130)		
DUP_202007070505	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0491	ug/L	98	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0488	ug/L	98	(70-130)	30	0.61
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00199	ug/L	99	(50-150)		
MS1_202007070504	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0254	ug/L	102	(70-130)		
DUP_202007070505	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0469	ug/L	94	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0484	ug/L	97	(70-130)	30	3.1
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00221	ug/L	111	(50-150)		
MS1_202007070504	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0252	ug/L	101	(70-130)		
DUP_202007070505	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0460	ug/L	104	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0463	ug/L	105	(70-130)	30	0.65
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00213	ug/L	120	(50-150)		
MS1_202007070504	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0234	ug/L	106	(70-130)		
DUP_202007070505	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0470	ug/L	94	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0497	ug/L	99	(70-130)	30	5.6
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00223	ug/L	111	(50-150)		
MS1_202007070504	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0255	ug/L	102	(70-130)		
DUP_202007070505	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0442	ug/L	88	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0490	ug/L	98	(70-130)	30	10
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00211	ug/L	106	(50-150)		
MS1_202007070504	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0237	ug/L	95	(70-130)		
DUP_202007070505	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0559	ug/L	112	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0556	ug/L	111	(70-130)	30	0.54
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00261	ug/L	130	(50-150)		
MS1_202007070504	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0300	ug/L	120	(70-130)		
DUP_202007070505	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0476	ug/L	104	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0474	ug/L	104	(70-130)	30	0.42
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00216	ug/L	118	(50-150)		
MS1_202007070504	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0247	ug/L	108	(70-130)		
DUP_202007070505	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0548	ug/L	110	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0553	ug/L	111	(70-130)	30	0.91
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00263	ug/L	131	(50-150)		
MS1_202007070504	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0287	ug/L	115	(70-130)		
DUP_202007070505	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0492	ug/L	98	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0498	ug/L	100	(70-130)	30	1.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00235	ug/L	117	(50-150)		
MS1_202007070504	Perfluorononanoic acid (PFNA)	ND	0.025	0.0263	ug/L	105	(70-130)		
DUP_202007070505	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0457	ug/L	99	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0469	ug/L	101	(70-130)	30	2.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00215	ug/L	116	(50-150)		
MS1_202007070504	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0237	ug/L	102	(70-130)		
DUP_202007070505	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0522	ug/L	104	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0515	ug/L	103	(70-130)	30	1.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00251	ug/L	126	(50-150)		
MS1_202007070504	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0276	ug/L	110	(70-130)		
DUP_202007070505	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0527	ug/L	105	(70-130)	30	5.9
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00290	ug/L	145	(50-150)		
MS1_202007070504	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0266	ug/L	106	(70-130)		
DUP_202007070505	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0468	ug/L	94	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0494	ug/L	99	(70-130)	30	5.2
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00214	ug/L	107	(50-150)		
MS1_202007070504	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0243	ug/L	97	(70-130)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 878992  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007070505	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0463	ug/L	93	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0513	ug/L	103	(70-130)	30	10
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00203	ug/L	102	(50-150)		
MS1_202007070504	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0245	ug/L	98	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 07/21/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 07/21/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 07/21/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for  
Presence or Absence, Quantification of Total Coliform and E. Coli  
By Quantitray**

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 07/21/2020

Quant Report - Page 1 of 1

, Tel Fax

## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-32285-1  
Client Project/Site: 878992

For:  
Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:  
7/14/2020 9:22:42 AM

Lori Thompson, Project Manager I  
(714)895-5494  
[lorithompson@eurofinsus.com](mailto:lorithompson@eurofinsus.com)

### LINKS

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*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 878992

Job ID: 570-32285-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 878992

Job ID: 570-32285-1

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**Job ID: 570-32285-1**

---

**Laboratory: Eurofins Calscience LLC**

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**Narrative**

**Job Narrative**  
**570-32285-1**

**Comments**

No additional comments.

**Receipt**

The sample was received on 7/1/2020 11:30 AM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

- 1
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# Detection Summary

Client: Eurofins Eaton Analytical  
Project/Site: 878992

Job ID: 570-32285-1

**Client Sample ID: 202006300497**

**Lab Sample ID: 570-32285-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	3.52		0.951	0.760	mg/L	1		1664A	Total/NA

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 878992

Job ID: 570-32285-1

## General Chemistry

Client Sample ID: 202006300497

Date Collected: 06/30/20 12:27

Date Received: 07/01/20 11:30

Lab Sample ID: 570-32285-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	3.52		0.951	0.760	mg/L		07/10/20 13:34	07/10/20 13:34	1

- 1
- 2
- 3
- 4
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- 10
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- 12
- 13
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# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 878992

Job ID: 570-32285-1

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 570-80577/1-A**  
**Matrix: Water**  
**Analysis Batch: 80874**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 80577**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		07/10/20 13:34	07/10/20 13:34	1

**Lab Sample ID: LCS 570-80577/2-A**  
**Matrix: Water**  
**Analysis Batch: 80874**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 80577**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	36.80		mg/L		92	78 - 114

**Lab Sample ID: LCSD 570-80577/3-A**  
**Matrix: Water**  
**Analysis Batch: 80874**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 80577**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	37.30		mg/L		93	78 - 114	1	18

**Lab Sample ID: 570-32772-D-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 80874**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 80577**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	1.32	F2 F1	37.9	35.89		mg/L		91	78 - 114

**Lab Sample ID: 570-32772-D-1-B MSD**  
**Matrix: Water**  
**Analysis Batch: 80874**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 80577**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	1.32	F2 F1	37.9	35.42		mg/L		90	78 - 114	1	18

# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 878992

Job ID: 570-32285-1

## General Chemistry

### Prep Batch: 80577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-32285-1	202006300497	Total/NA	Water	1664A	
MB 570-80577/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-80577/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-80577/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
570-32772-D-1-A MS	Matrix Spike	Total/NA	Water	1664A	
570-32772-D-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	1664A	

### Analysis Batch: 80874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-32285-1	202006300497	Total/NA	Water	1664A	80577
MB 570-80577/1-A	Method Blank	Total/NA	Water	1664A	80577
LCS 570-80577/2-A	Lab Control Sample	Total/NA	Water	1664A	80577
LCSD 570-80577/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	80577
570-32772-D-1-A MS	Matrix Spike	Total/NA	Water	1664A	80577
570-32772-D-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	1664A	80577

# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 878992

Job ID: 570-32285-1

**Client Sample ID: 202006300497**

**Lab Sample ID: 570-32285-1**

**Date Collected: 06/30/20 12:27**

**Matrix: Water**

**Date Received: 07/01/20 11:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1052 mL	1000 mL	80577	07/10/20 13:34	SAL	ECL 1
Total/NA	Analysis	1664A		1			80874	07/10/20 13:34	UFLU	ECL 1

Instrument ID: NOEQUIP

### Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 878992

Job ID: 570-32285-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

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# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 878992

Job ID: 570-32285-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

**Protocol References:**

1664A = EPA-821-98-002

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 878992

Job ID: 570-32285-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-32285-1	202006300497	Water	06/30/20 12:27	07/01/20 11:30	

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- 1
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32285

Submittal Form

Date: 7/1/2020

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder # 878992 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature.

Reports: Jackie Contreras Sub-Contracting Administrator  
EMAIL TO: us20\_subcontract@eurofinsus.com  
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
Phone (626) 386-1165 Fax (626) 386-1122  
Invoices to: Eurofins Eaton Analytical, LLC  
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix.  
Samples from: CALIFORNIA

**eurofins** Eaton Analytical

Ship To:  
Eurofins CalScience  
7440 Lincoln Way  
Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 878992 Report Due: 07/15/2020

Sample ID: 202006300497 Client Sample ID for reference on: LH-INF-20200630 PWS Systemcode: PWSID JLS

Sample type: Sample Event: Facility ID: Sample Point ID: Static ID:

Method: EPA 1684 Prep Method: Analysis Requested: Oil and Grease by 1684(subbed)

Sample Date & Time Matrix: 06/30/20 1227 DW



Relinquished by: Xan Date: 7/1/20 Time: 1130

Received by: Xan Date: 7/1/20 Time: 1130

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS  
An Acknowledgement of Receipt is requested to attn: Jackie Contreras

30/2016 SC6

# Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-32285-1

**Login Number: 32285**

**List Number: 1**

**Creator: Le, Danny**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 881682  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 881682  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:  
 PO #: 5302

The following samples were received from you on **July 15, 2020 at 1252**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202007150536	GAC-1-20200715 Static ID: 537.1 @537.1	07/15/2020 0832
202007150537	GAC-2-20200715 Static ID: 537.1 @537.1	07/15/2020 0835
202007150538	GAC-3-20200715 Static ID: 537.1 @537.1	07/15/2020 0838
202007150539	GAC-4-20200715 Static ID: 537.1 @537.1	07/15/2020 0841
202007150540	IX-1-20200715 Static ID: 537.1 @537.1	07/15/2020 0844
202007150541	IX-2-20200715 Static ID: 537.1 @537.1	07/15/2020 0847
202007150542	IX-3-20200715 Static ID: 537.1 @537.1	07/15/2020 0850
202007150543	IX-4-20200715 Static ID: 537.1 @537.1	07/15/2020 0853
202007150544	LH-INF-20200715 @537.1 Chloride @ANIONS48 Sulfate Alkalinity in CaCO3 units Total Organic Carbon	07/15/2020 0856
202007150545	GAC-5-20200715 Static ID: 537.1 @537.1	07/15/2020 1032
202007150546	GAC-6-20200715	07/15/2020 1035

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 881682  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:  
 PO #: 5302

The following samples were received from you on **July 15, 2020 at 1252**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	Static ID: 537.1	
	@537.1	
<u>202007150547</u>	GAC-7-20200715	07/15/2020 1038
	Static ID: 537.1	
	@537.1	
<u>202007150548</u>	GAC-8-20200715	07/15/2020 1041
	Static ID: 537.1	
	@537.1	
<u>202007150549</u>	IX-5-20200715	07/15/2020 1044
	Static ID: 537.1	
	@537.1	
<u>202007150550</u>	IX-6-20200715	07/15/2020 1047
	Static ID: 537.1	
	@537.1	
<u>202007150551</u>	IX-7-20200715	07/15/2020 1050
	Static ID: 537.1	
	@537.1	
<u>202007150552</u>	IX-8-20200715	07/15/2020 1053
	Static ID: 537.1	
	@537.1	
<u>202007150554</u>	MB-INF-20200715	07/15/2020 1056
	@537.1	
	Chloride	
	@ANIONS48	Alkalinity in CaCO3 units
	Sulfate	Total Organic Carbon

#### Test Description

@537.1 -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0





881682

<b>FROM:</b> GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com <b>LABORATORY:</b> Eurofins Eaton Analytical	<b>PROJECT NAME:</b> WRD Pilot <b>PROJECT CONTACT:</b> Miae Jeon <b>GLOBAL ID:</b> <b>PROJECT NO.:</b> 5302 <b>LAB CONTACT:</b> Sophia Liang <b>SAMPLER(S): (PRINT)</b> PDT	<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.																																																																																																																																																																																																								
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">LAB USE ONLY</th> <th rowspan="2">SAMPLE ID</th> <th colspan="2">SAMPLING TIME</th> <th rowspan="2">MATRIX</th> <th rowspan="2">NO. OF CONT.</th> <th colspan="3">Preservation</th> <th rowspan="2">PFAS - full list (EPA 537.1)</th> <th rowspan="2">Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)</th> <th rowspan="2">Alkalinity (as CaCO3), (SM 2320B)</th> <th rowspan="2">TOC (SM 5310C)</th> </tr> <tr> <th>DATE</th> <th>TIME</th> <th>Unpreserved</th> <th>Preserved</th> <th>Field Filtered</th> </tr> </thead> <tbody> <tr> <td></td> <td>GAC-1-20200715</td> <td>7-15</td> <td>0832</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-2-20200715</td> <td></td> <td>0835</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-3-20200715</td> <td></td> <td>0838</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-4-20200715</td> <td></td> <td>0841</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-1-20200715</td> <td></td> <td>0844</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-2-20200715</td> <td></td> <td>0847</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-3-20200715</td> <td></td> <td>0850</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-4-20200715</td> <td></td> <td>0853</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>LH-INF-20200715</td> <td></td> <td>0856</td> <td>Water</td> <td>5</td> <td></td> <td>23</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>LH-INF-DUP</td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-5-20200715</td> <td>7-15</td> <td>1032</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-6-20200715</td> <td></td> <td>1035</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-7-20200715</td> <td></td> <td>1038</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-8-20200715</td> <td></td> <td>1041</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			LAB USE ONLY	SAMPLE ID	SAMPLING TIME		MATRIX	NO. OF CONT.	Preservation			PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	DATE	TIME	Unpreserved	Preserved	Field Filtered		GAC-1-20200715	7-15	0832	Water	2		2		X					GAC-2-20200715		0835	Water	2		2		X					GAC-3-20200715		0838	Water	2		2		X					GAC-4-20200715		0841	Water	2		2		X					IX-1-20200715		0844	Water	2		2		X					IX-2-20200715		0847	Water	2		2		X					IX-3-20200715		0850	Water	2		2		X					IX-4-20200715		0853	Water	2		2		X					LH-INF-20200715		0856	Water	5		23		X	X	X			LH-INF-DUP			Water										GAC-5-20200715	7-15	1032	Water	2		2		X					GAC-6-20200715		1035	Water	2		2		X					GAC-7-20200715		1038	Water	2		2		X					GAC-8-20200715		1041	Water	2		2		X			
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*811082*

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) <i>RDT</i>								
TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com LABORATORY: Eurofins Eaton Analytical		<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.										
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results										
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	IX-5-20200715	7-15	1044	Water	2		2		X			
	IX-6-20200715		1047	Water	2		2		X			
	IX-7-20200715		1050	Water	2		2		X			
	IX-8-20200715		1053	Water	2		2		X			
	MB-INF-20200715		1056	Water	5		23		X	X	X	X
	MB-INF-DUP-20200715		<del>1056</del>	Water	2		2		X			
	FB			Water								
Relinquished by: (Signature) <i>[Signature]</i>		Date: <u>7-15-2020</u>		Time: <u>1251</u>		Received by: (Signature)		Date: <u>7-15-2020</u>		Time: <u>1252</u>		
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750 Royal Oaks Drive, Suite 100  
 Monrovia, California 91016-3529  
 (626) 386-1100 FAX (666) 988-3757

Created Date & Time: 6/26/2020 10:23:10 AM

**Note: Sampler Please return this paper with your samples**

Client ID: WRO



Project Code: 0250000 Bottle Orders  
 Group Name: WRD Pilot[Set#2]  
 PO#/JOB#:

Description: WRD Pilot[Set#2]  
 Shipping Method: Pickup by client



Kit #: 266974

Created By: Anisha Zachariah - [ZR46]  
 Deliver By: 07/07/2020

STG: Bottle Orders  
 Ice Type: G

Ship Sample Kits to  
 GSI Environmental Inc  
 Attn: Robert Torres  
 Phone 951-616-8406

Send Report to  
 Water Replenishment District  
 4040 Paramount Blvd  
 Lakewood, CA 90712  
 Attn: Joseph Liles  
 Phone: 562-275-4226

Billing Address  
 Water Replenishment District  
 Attn: Eurofins Calscience  
 Water Replenishment District  
 4040 Paramount Blvd  
 Lakewood, CA 90712  
 Attn: Brian Partington  
 Phone: 562-275-4249  
 Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [ preservative information ]	Total	UN DOT #
4	Total Organic Carbon	4	UN1830
4	@ANIONS48, Chloride, Sulfate	4	
4	Alkalinity in CaCO3 units	4	
40	@537.1	80	
2	@537.1 TB	2	
2	@537.1 FB	2	
<b>Sum Tests: 56</b>		<b>Sum Bottles: 96</b>	

**Comments**

SHIPPING:  
 - CLIENT PIU TUESDAY, JULY 7TH MORNING  
 - PACKAGE IN 4 x 32 QT COOLERS

**GSI SAMPLER:**

- PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COC ALONG WITH THE SAMPLES.  
 - NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP.

**ASM:**

\*Please also send invoices to Miae Jeon (mjeon@gsi-net.com)  
 \*Report copies to be sent to Miae Jeon, mjeon@gsi-net.com, Pat Galvin, pgalvin@gsi-net.com, and rdlorres@gsi-net.com.

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 881682

**SAMPLE TEMP RECEIVED:**

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.  
**SAMPLES REC'D DAY OF COLLECTION? Yes / No**

R Gun ID = 6491 (Observation = 7.5 °C) (Corr. Factor -0.3 °C) (Final = 7.2 °C)

TYPE OF ICE: Real  Synthetic  No Ice  CONDITION OF ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

**Compliance Acceptance Criteria:**

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) VOA Headspace:  No Samples with Headspace:  Samples with Headspace (see below):   
 Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods: 515-4, HAA(625+552)-505, SPM, @GH-532LCMS, 556, 536, Anatolin, LCMS methods using 40 ml vials, International clients:

Sample ID	Bottle #	None/<6 mm	>6mm	Sample ID	Bottle #	None/<6 mm	>6mm	Sample ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: Yalen SIGNATURE: Yalen PRINT NAME: Yalen COMPANY/TITLE: Eurofins Eaton Analytical DATE: 7-15-20 TIME: 1252

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	<b>202007150542</b>	<b><u>IX-3-20200715</u></b>				
07/16/2020 20:45	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
	<b>202007150544</b>	<b><u>LH-INF-20200715</u></b>				
07/20/2020 20:34	Alkalinity in CaCO3 units		200		mg/L	2.0
07/15/2020 23:45	Chloride		110	250	mg/L	2.5
07/15/2020 23:45	Nitrate as Nitrogen by IC		2.7	10	mg/L	0.50
07/15/2020 23:45	Nitrate as NO3 (calc)		12	45	mg/L	2.2
07/23/2020 13:33	Perfluorobutanesulfonic acid (PFBS)		0.0065		ug/L	0.0020
07/23/2020 13:33	Perfluoroheptanoic acid (PFHpA)		0.0020		ug/L	0.0020
07/23/2020 13:33	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
07/23/2020 13:33	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
07/23/2020 13:33	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
07/23/2020 13:33	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
07/23/2020 13:33	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
07/15/2020 23:45	Sulfate		170	250	mg/L	2.5
07/15/2020 23:45	Total Nitrate, Nitrite-N, CALC		2.7		mg/L	0.10
07/18/2020 08:31	Total Organic Carbon		0.59		mg/L	0.30
	<b>202007150551</b>	<b><u>IX-7-20200715</u></b>				
07/23/2020 14:11	Perfluorohexanoic acid (PFHxA)		0.0047		ug/L	0.0020
	<b>202007150552</b>	<b><u>IX-8-20200715</u></b>				
07/16/2020 20:17	Perfluorohexanoic acid (PFHxA)		0.0025		ug/L	0.0020
	<b>202007150554</b>	<b><u>MB-INF-20200715</u></b>				
07/20/2020 20:26	Alkalinity in CaCO3 units		170		mg/L	2.0
07/15/2020 23:58	Chloride		53	250	mg/L	2.5
07/15/2020 23:58	Nitrate as Nitrogen by IC		2.3	10	mg/L	0.50
07/15/2020 23:58	Nitrate as NO3 (calc)		10	45	mg/L	2.2
07/23/2020 14:20	Perfluorobutanesulfonic acid (PFBS)		0.0090		ug/L	0.0020
07/23/2020 14:20	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
07/23/2020 14:20	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
07/23/2020 14:20	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
07/23/2020 14:20	Perfluorononanoic acid (PFNA)		0.0035		ug/L	0.0020
07/23/2020 14:20	Perfluorooctanesulfonic acid (PFOS)		0.033		ug/L	0.0020
07/23/2020 14:20	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
07/15/2020 23:58	Sulfate		78	250	mg/L	2.5
07/15/2020 23:58	Total Nitrate, Nitrite-N, CALC		2.3		mg/L	0.10

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
Fax: (626) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Report:** 881682  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

Samples Received on:  
07/15/2020 1252

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
07/20/2020 21:11	Total Organic Carbon		0.72		mg/L	0.30

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20200715 (202007150536)</b>						<b>Sampled on 07/15/2020 0832</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.0050	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	13C2-PFDA	91	%	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	13C2-PFHxA	95	%	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	13C2-PFOA- IS#1	107	%	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	13C3-HFPO-DA	89	%	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	13C4-PFOS- IS#2	105	%	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	d3-NMeFOSAA	102	%	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	d5-NEtFOSAA	91	%	1

<b>GAC-2-20200715 (202007150537)</b>						<b>Sampled on 07/15/2020 0835</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
07/16/20	07/21/20	15:56	1261964	1263388	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0020	1
07/16/20	07/21/20	15:56	1261964	1263388	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	13C2-PFDA	78	%		1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	13C2-PFHxA	89	%		1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	13C3-HFPO-DA	78	%		1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	d3-NMeFOSAA	105	%		1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	d5-NEtFOSAA	86	%		1

**GAC-3-20200715 (202007150538)**

Sampled on 07/15/2020 0838

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



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 1 800 566 LABS (1 800 566 5227)

Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	13C2-PFDA	86	%		1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	13C2-PFHxA	96	%		1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	13C3-HFPO-DA	85	%		1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	d3-NMeFOSAA	104	%		1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	d5-NeFOSAA	87	%		1

**GAC-4-20200715 (202007150539)**

Sampled on 07/15/2020 0841

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	13C2-PFDA	89	%		1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	13C2-PFHxA	100	%		1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	13C3-HFPO-DA	90	%		1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	d3-NMeFOSAA	103	%		1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	d5-NEtFOSAA	87	%		1

**IX-1-20200715 (202007150540)**

Static ID: 537.1

Sampled on 07/15/2020 0844

**EPA 537.1 - EPA Method 537.1**

07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	13C2-PFDA	91	%		1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	13C2-PFHxA	97	%		1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	13C3-HFPO-DA	86	%		1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	d3-NMeFOSAA	104	%		1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**IX-2-20200715 (202007150541)**

**Sampled on 07/15/2020 0847**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	13C2-PFDA	82	%		1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	13C2-PFHxA	86	%		1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	13C3-HFPO-DA	79	%		1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	d3-NMeFOSAA	109	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	d5-NEtFOSAA	88	%		1
<b>IX-3-20200715 (202007150542)</b>						<b>Sampled on 07/15/2020 0850</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	13C2-PFDA	80	%		1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	13C2-PFHxA	83	%		1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	13C3-HFPO-DA	78	%		1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	d3-NMeFOSAA	110	%		1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	d5-NEtFOSAA	85	%		1
<b>IX-4-20200715 (202007150543)</b>						<b>Sampled on 07/15/2020 0853</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	13C2-PFDA	78	%		1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	13C2-PFHxA	82	%		1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	13C2-PFOA- IS#1	125	%		1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	13C3-HFPO-DA	76	%		1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	d3-NMeFOSAA	108	%		1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	d5-NEtFOSAA	87	%		1

**LH-INF-20200715 (202007150544)**

Sampled on 07/15/2020 0856

**SM 5310C - Total Organic Carbon**

07/18/20 08:31	1262466	(SM 5310C)	Total Organic Carbon	0.59	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

07/15/20 23:45	1261861	(EPA 300.0)	Nitrate as Nitrogen by IC	2.7	mg/L	0.50	5
07/15/20 23:45	1261861	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
07/15/20 23:45	1261861	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
07/15/20 23:45	1261861	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.7	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

07/15/20 23:45	1261864	(EPA 300.0)	Chloride	110	mg/L	2.5	5
07/15/20 23:45	1261864	(EPA 300.0)	Sulfate	170	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

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Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0065	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0020	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	13C2-PFDA	93	%		1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	13C2-PFHxA	101	%		1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	13C3-HFPO-DA	91	%		1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	d3-NMeFOSAA	108	%		1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**SM 2320B - Alkalinity in CaCO3 units**

07/20/20 20:34	1262820	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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**GAC-5-20200715 (202007150545)**

Sampled on 07/15/2020 1032

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	13C2-PFDA	96	%		1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	13C2-PFHxA	108	%		1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	13C3-HFPO-DA	97	%		1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	d3-NMeFOSAA	104	%		1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**GAC-6-20200715 (202007150546)**

Sampled on 07/15/2020 1035

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	13C2-PFDA	81	%		1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	13C2-PFHxA	87	%		1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	13C3-HFPO-DA	79	%		1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	d3-NMeFOSAA	107	%		1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	d5-NEtFOSAA	87	%		1

**GAC-7-20200715 (202007150547)**

Sampled on 07/15/2020 1038

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



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 1 800 566 LABS (1 800 566 5227)

Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	13C2-PFDA	100	%		1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	13C2-PFHxA	106	%		1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	13C3-HFPO-DA	97	%		1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	d3-NMeFOSAA	106	%		1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**GAC-8-20200715 (202007150548)**

Sampled on 07/15/2020 1041

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	13C2-PFDA	86	%		1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	13C2-PFHxA	94	%		1

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 1 800 566 LABS (1 800 566 5227)

Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	13C3-HFPO-DA	82	%		1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	d3-NMeFOSAA	107	%		1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	d5-NEtFOSAA	88	%		1
<b>IX-5-20200715 (202007150549)</b>						<b>Sampled on 07/15/2020 1044</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	13C2-PFDA	99	%		1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	13C2-PFHxA	106	%		1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	13C3-HFPO-DA	95	%		1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	d3-NMeFOSAA	107	%		1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**IX-6-20200715 (202007150550)**

**Sampled on 07/15/2020 1047**

Static ID: 537.1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 537.1 - EPA Method 537.1</b>									
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	13C2-PFDA	81	%		1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	13C2-PFHxA	78	%		1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	13C2-PFOA- IS#1	129	%		1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	13C3-HFPO-DA	71	%		1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	d3-NMeFOSAA	112	%		1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	d5-NEtFOSAA	88	%		1

**IX-7-20200715 (202007150551)**

Sampled on 07/15/2020 1050

Static ID: 537.1

<b>EPA 537.1 - EPA Method 537.1</b>									
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0047	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	13C2-PFDA	96	%		1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	13C2-PFHxA	102	%		1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	13C3-HFPO-DA	93	%		1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	d3-NMeFOSAA	109	%		1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**IX-8-20200715 (202007150552)**

Sampled on 07/15/2020 1053

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0025	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	13C2-PFDA	77	%		1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	13C2-PFHxA	77	%		1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	13C2-PFOA- IS#1	133	%		1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	13C3-HFPO-DA	71	%		1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	d3-NMeFOSAA	112	%		1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	d5-NEtFOSAA	89	%		1

**MB-INF-20200715 (202007150554)**

Sampled on 07/15/2020 1056

**SM 5310C - Total Organic Carbon**

07/20/20 21:11	1262802	(SM 5310C)	Total Organic Carbon	0.72	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

07/15/20 23:58	1261861	(EPA 300.0)	Nitrate as Nitrogen by IC	2.3	mg/L	0.50	5
07/15/20 23:58	1261861	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5
07/15/20 23:58	1261861	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
07/15/20 23:58	1261861	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.3	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

07/15/20 23:58	1261864	(EPA 300.0)	Chloride	53	mg/L	2.5	5
07/15/20 23:58	1261864	(EPA 300.0)	Sulfate	78	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**

Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0090	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0035	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.033	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	13C2-PFDA	87	%		1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	13C2-PFHxA	95	%		1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	13C2-PFOA- IS#1	127	%		1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	13C3-HFPO-DA	84	%		1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	d3-NMeFOSAA	112	%		1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	d5-NEtFOSAA	94	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	07/20/20 20:26		1262820	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1

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**Report:** 881682  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1261861**

202007150544 LH-INF-20200715  
 202007150554 MB-INF-20200715

**Analysis Date: 07/15/2020**

Analyzed by: B9PD  
 Analyzed by: B9PD

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1261864**

202007150544 LH-INF-20200715  
 202007150554 MB-INF-20200715

**Analysis Date: 07/15/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**EPA Method 537.1**

**Prep Batch: 1261953 Analytical Batch: 1262313**

202007150541 IX-2-20200715  
 202007150542 IX-3-20200715  
 202007150543 IX-4-20200715  
 202007150546 GAC-6-20200715  
 202007150548 GAC-8-20200715  
 202007150550 IX-6-20200715  
 202007150552 IX-8-20200715

**Analysis Date: 07/16/2020**

Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM

**Total Organic Carbon**

**Analytical Batch: 1262466**

202007150544 LH-INF-20200715

**Analysis Date: 07/18/2020**

Analyzed by: ZS6I

**Total Organic Carbon**

**Analytical Batch: 1262802**

202007150554 MB-INF-20200715

**Analysis Date: 07/20/2020**

Analyzed by: ZS6I

**Alkalinity in CaCO3 units**

**Analytical Batch: 1262820**

202007150544 LH-INF-20200715  
 202007150554 MB-INF-20200715

**Analysis Date: 07/20/2020**

Analyzed by: ZB2Z  
 Analyzed by: ZB2Z

**EPA Method 537.1**

**Prep Batch: 1261964 Analytical Batch: 1263388**

202007150536 GAC-1-20200715  
 202007150537 GAC-2-20200715  
 202007150538 GAC-3-20200715  
 202007150539 GAC-4-20200715  
 202007150540 IX-1-20200715

**Analysis Date: 07/21/2020**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM

**EPA Method 537.1**

**Prep Batch: 1263175 Analytical Batch: 1263915**

202007150544 LH-INF-20200715  
 202007150545 GAC-5-20200715  
 202007150547 GAC-7-20200715  
 202007150549 IX-5-20200715  
 202007150551 IX-7-20200715  
 202007150554 MB-INF-20200715

**Analysis Date: 07/23/2020**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1261861</b>					<b>Analysis Date: 07/15/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.60	mg/L	104	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.59	mg/L	104	(90-110)	20	0.39
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0522	mg/L	104	(50-150)		
MRLLLW	Nitrate as Nitrogen by IC		0.013	0.0108	mg/L	86	(50-150)		
MS_202007150554	Nitrate as Nitrogen by IC	2.3	6.5	8.76	mg/L	104	(80-120)		
MS_202007150580	Nitrate as Nitrogen by IC	1.0	2.6	3.54	mg/L	101	(80-120)		
MSD_202007150554	Nitrate as Nitrogen by IC	2.3	6.5	8.69	mg/L	102	(80-120)	20	0.83
MSD_202007150580	Nitrate as Nitrogen by IC	1.0	2.6	3.54	mg/L	101	(80-120)	20	0.068
LCS1	Nitrite Nitrogen by IC		1	1.05	mg/L	105	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.05	mg/L	105	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0484	mg/L	97	(50-150)		
MRLLLW	Nitrite Nitrogen by IC		0.013	0.0138	mg/L	110	(50-150)		
MS_202007150554	Nitrite Nitrogen by IC	ND	2.5	2.53	mg/L	101	(80-120)		
MS_202007150580	Nitrite Nitrogen by IC	ND	1	1.00	mg/L	97	(80-120)		
MSD_202007150554	Nitrite Nitrogen by IC	ND	2.5	2.50	mg/L	100	(80-120)	20	1.3
MSD_202007150580	Nitrite Nitrogen by IC	ND	1	1.01	mg/L	98	(80-120)	20	0.75
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1261864</b>					<b>Analysis Date: 07/15/2020</b>				
LCS1	Chloride		25	27.0	mg/L	108	(90-110)		
LCS2	Chloride		25	26.9	mg/L	108	(90-110)	20	0.37
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.467	mg/L	93	(50-150)		
MS_202007150554	Chloride	53	65	122	mg/L	111	(80-120)		
MS_202007150580	Chloride	60	26	84.7	mg/L	100	(80-120)		
MSD_202007150554	Chloride	53	65	121	mg/L	110	(80-120)	20	1.1
MSD_202007150580	Chloride	60	26	84.7	mg/L	100	(80-120)	20	0.048
LCS1	Sulfate		50	52.9	mg/L	106	(90-110)		
LCS2	Sulfate		50	52.8	mg/L	106	(90-110)	20	0.19
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	1.02	mg/L	102	(50-150)		
MRLLLW	Sulfate		0.25	0.266	mg/L	106	(50-150)		
MS_202007150554	Sulfate	78	125	212	mg/L	107	(80-120)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.



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Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202007150580	Sulfate	74	50	127	mg/L	105	(80-120)		
MSD_202007150554	Sulfate	78	125	210	mg/L	106	(80-120)	20	0.87
MSD_202007150580	Sulfate	74	50	127	mg/L	106	(80-120)	20	0.079

EPA Method 537.1 by EPA 537.1

Prep Batch: 1261953 Analytical Batch: 1262313

Analysis Date: 07/16/2020

DUP	QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007150552		11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3		11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0469	ug/L	100	(70-130)		
LCS4		11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0450	ug/L	96	(70-130)	30	3.9
MBLK		11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK		11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00196	ug/L	105	(50-150)		
MS1_202007150548		11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0223	ug/L	95	(70-130)		
DUP_202007150552		13C2-PFDA (S)			83.9	%	84	(70-130)		
LCS3		13C2-PFDA (S)		100	86.9	%	87	(70-130)		
LCS4		13C2-PFDA (S)		100	85.1	%	85	(70-130)		
MBLK		13C2-PFDA (S)			83.5	%	83	(70-130)		
MRL_CHK		13C2-PFDA (S)		100	87.3	%	87	(70-130)		
MS1_202007150548		13C2-PFDA (S)		100	80.8	%	81	(70-130)		
DUP_202007150552		13C2-PFHxA (S)			83.5	%	83	(70-130)		
LCS3		13C2-PFHxA (S)		100	90.6	%	91	(70-130)		
LCS4		13C2-PFHxA (S)		100	93.3	%	93	(70-130)		
MBLK		13C2-PFHxA (S)			90.8	%	91	(70-130)		
MRL_CHK		13C2-PFHxA (S)		100	95.3	%	95	(70-130)		
MS1_202007150548		13C2-PFHxA (S)		100	93.6	%	94	(70-130)		
DUP_202007150552		13C2-PFOA- IS#1 (I)			122	%	123	(50-150)		
LCS3		13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
LCS4		13C2-PFOA- IS#1 (I)		100	113	%	113	(50-150)		
MBLK		13C2-PFOA- IS#1 (I)			119	%	119	(50-150)		
MRL_CHK		13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
MS1_202007150548		13C2-PFOA- IS#1 (I)		100	117	%	117	(50-150)		
DUP_202007150552		13C3-HFPO-DA (S)			75.5	%	76	(70-130)		
LCS3		13C3-HFPO-DA (S)		100	81.1	%	81	(70-130)		
LCS4		13C3-HFPO-DA (S)		100	82.5	%	83	(70-130)		
MBLK		13C3-HFPO-DA (S)			75.2	%	75	(70-130)		
MRL_CHK		13C3-HFPO-DA (S)		100	83.9	%	84	(70-130)		
MS1_202007150548		13C3-HFPO-DA (S)		100	78.5	%	78	(70-130)		
DUP_202007150552		13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
LCS3		13C4-PFOS- IS#2 (I)		100	97.3	%	97	(50-150)		

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Report: 881682  
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 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	13C4-PFOS- IS#2 (I)		100	99.6	%	100	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MS1_202007150548	13C4-PFOS- IS#2 (I)		100	99.8	%	100	(50-150)		
DUP_202007150552	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0473	ug/L	98	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0450	ug/L	93	(70-130)	30	5.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00215	ug/L	114	(50-150)		
MS1_202007150548	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0235	ug/L	100	(70-130)		
DUP_202007150552	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0490	ug/L	105	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0466	ug/L	100	(70-130)	30	5.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00211	ug/L	113	(50-150)		
MS1_202007150548	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0233	ug/L	100	(70-130)		
DUP_202007150552	d3-NMeFOSAA (I)			109	%	109	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
MBLK	d3-NMeFOSAA (I)			105	%	105	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	111	%	111	(50-150)		
MS1_202007150548	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
DUP_202007150552	d5-NEtFOSAA (S)			90.8	%	91	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	84.9	%	85	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	82.0	%	82	(70-130)		
MBLK	d5-NEtFOSAA (S)			87.7	%	88	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	85.5	%	85	(70-130)		
MS1_202007150548	d5-NEtFOSAA (S)		100	79.7	%	80	(70-130)		
DUP_202007150552	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0436	ug/L	87	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0429	ug/L	86	(70-130)	30	1.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00201	ug/L	100	(50-150)		
MS1_202007150548	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0220	ug/L	88	(70-130)		
DUP_202007150552	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0495	ug/L	99	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0465	ug/L	93	(70-130)	30	6.3
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 881682  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS1_202007150548	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0241	ug/L	96	(70-130)		
DUP_202007150552	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0477	ug/L	96	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0453	ug/L	91	(70-130)	30	5.2
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00208	ug/L	104	(50-150)		
MS1_202007150548	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0232	ug/L	93	(70-130)		
DUP_202007150552	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0470	ug/L	106	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0449	ug/L	101	(70-130)	30	4.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00206	ug/L	116	(50-150)		
MS1_202007150548	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0241	ug/L	109	(70-130)		
DUP_202007150552	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0489	ug/L	98	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0472	ug/L	95	(70-130)	30	3.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00226	ug/L	113	(50-150)		
MS1_202007150548	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0232	ug/L	93	(70-130)		
DUP_202007150552	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0471	ug/L	94	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0458	ug/L	92	(70-130)	30	2.8
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00217	ug/L	109	(50-150)		
MS1_202007150548	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0222	ug/L	89	(70-130)		
DUP_202007150552	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0501	ug/L	100	(70-130)	30	2.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00241	ug/L	121	(50-150)		
MS1_202007150548	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0253	ug/L	101	(70-130)		
DUP_202007150552	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0480	ug/L	105	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0466	ug/L	102	(70-130)	30	3.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00217	ug/L	119	(50-150)		
MS1_202007150548	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0245	ug/L	108	(70-130)		

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Report: 881682  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007150552	Perfluorohexanoic acid (PFHxA)	0.0025		0.00253	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0518	ug/L	104	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0499	ug/L	100	(70-130)	30	3.7
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00241	ug/L	120	(50-150)		
MS1_202007150548	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0247	ug/L	98	(70-130)		
DUP_202007150552	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0478	ug/L	96	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0492	ug/L	98	(70-130)	30	2.9
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00230	ug/L	115	(50-150)		
MS1_202007150548	Perfluorononanoic acid (PFNA)	ND	0.025	0.0246	ug/L	98	(70-130)		
DUP_202007150552	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0457	ug/L	99	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0454	ug/L	98	(70-130)	30	0.66
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00216	ug/L	117	(50-150)		
MS1_202007150548	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0240	ug/L	104	(70-130)		
DUP_202007150552	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0525	ug/L	105	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0507	ug/L	101	(70-130)	30	3.5
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00240	ug/L	120	(50-150)		
MS1_202007150548	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0259	ug/L	103	(70-130)		
DUP_202007150552	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0457	ug/L	92	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0444	ug/L	89	(70-130)	30	2.9
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00198	ug/L	99	(50-150)		
MS1_202007150548	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0221	ug/L	89	(70-130)		
DUP_202007150552	Perfluorotridecanoic acid (PFTTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTTrDA)		0.05	0.0434	ug/L	87	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTTrDA)		0.05	0.0429	ug/L	86	(70-130)	30	1.4
MBLK	Perfluorotridecanoic acid (PFTTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTTrDA)		0.002	0.00192	ug/L	96	(50-150)		
MS1_202007150548	Perfluorotridecanoic acid (PFTTrDA)	ND	0.025	0.0202	ug/L	81	(70-130)		
DUP_202007150552	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0490	ug/L	98	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0473	ug/L	95	(70-130)	30	3.5
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00222	ug/L	111	(50-150)		
MS1_202007150548	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0236	ug/L	94	(70-130)		

**Total Organic Carbon by SM 5310C**

**Analytical Batch: 1262466**

**Analysis Date: 07/18/2020**

LCS1	Total Organic Carbon		5	4.87	mg/L	97	(90-110)		
LCS2	Total Organic Carbon		5	4.75	mg/L	95	(90-110)	20	2.5
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.241	mg/L	120	(50-150)		
MS_202007150502	Total Organic Carbon	2.2	4	5.86	mg/L	92	(80-120)		
MS2_202007150544	Total Organic Carbon	0.59	2	2.48	mg/L	95	(80-120)		
MSD_202007150502	Total Organic Carbon	2.2	4	5.98	mg/L	95	(80-120)	20	2.2
MSD2_202007150544	Total Organic Carbon	0.59	2	2.52	mg/L	97	(80-120)	20	1.6

**Total Organic Carbon by SM 5310C**

**Analytical Batch: 1262802**

**Analysis Date: 07/20/2020**

LCS1	Total Organic Carbon		5	4.92	mg/L	98	(90-110)		
LCS2	Total Organic Carbon		5	4.85	mg/L	97	(90-110)	20	1.4
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.244	mg/L	122	(50-150)		
MS_202007150645	Total Organic Carbon	2.6	4	6.30	mg/L	93	(80-120)		
MS2_202007150640	Total Organic Carbon	2.6	2	4.50	mg/L	97	(80-120)		
MSD_202007150645	Total Organic Carbon	2.6	4	6.21	mg/L	91	(80-120)	20	1.5
MSD2_202007150640	Total Organic Carbon	2.6	2	4.35	mg/L	89	(80-120)	20	3.4

**Alkalinity in CaCO3 units by SM 2320B**

**Analytical Batch: 1262820**

**Analysis Date: 07/20/2020**

LCS1	Alkalinity in CaCO3 units		100	99.6	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.8	mg/L	100	(90-110)	20	0.20
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.04	mg/L	102	(50-150)		
MS_202007160383	Alkalinity in CaCO3 units	7.5	100	109	mg/L	101	(80-120)		
MS_202007170398	Alkalinity in CaCO3 units	6.3	100	106	mg/L	100	(80-120)		
MSD_202007160383	Alkalinity in CaCO3 units	7.5	100	109	mg/L	101	(80-120)	20	0.21
MSD_202007170398	Alkalinity in CaCO3 units	6.3	100	107	mg/L	100	(80-120)	20	0.91

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>EPA Method 537.1 by EPA 537.1</b>									
<b>Prep Batch: 1261964 Analytical Batch: 1263388</b>					<b>Analysis Date: 07/21/2020</b>				
DUP_202007150539	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0488	ug/L	104	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0466	ug/L	99	(70-130)	30	4.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00252	ug/L	134	(50-150)		
MS2_202007150536	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0471	ug/L	100	(70-130)		
DUP_202007150539	13C2-PFDA (S)			91.5	%	92	(70-130)		
LCS3	13C2-PFDA (S)		100	91.4	%	91	(70-130)		
LCS4	13C2-PFDA (S)		100	91.9	%	92	(70-130)		
MBLK	13C2-PFDA (S)			88.0	%	88	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	89.7	%	90	(70-130)		
MS2_202007150536	13C2-PFDA (S)		100	89.0	%	89	(70-130)		
DUP_202007150539	13C2-PFHxA (S)			102	%	102	(70-130)		
LCS3	13C2-PFHxA (S)		100	101	%	101	(70-130)		
LCS4	13C2-PFHxA (S)		100	97.2	%	97	(70-130)		
MBLK	13C2-PFHxA (S)			97.4	%	97	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	96.3	%	96	(70-130)		
MS2_202007150536	13C2-PFHxA (S)		100	102	%	102	(70-130)		
DUP_202007150539	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
MS2_202007150536	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
DUP_202007150539	13C3-HFPO-DA (S)			89.2	%	89	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	91.1	%	91	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	88.6	%	89	(70-130)		
MBLK	13C3-HFPO-DA (S)			90.3	%	90	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	86.1	%	86	(70-130)		
MS2_202007150536	13C3-HFPO-DA (S)		100	88.3	%	88	(70-130)		
DUP_202007150539	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			100	%	100	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202007150536	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
DUP_202007150539	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0491	ug/L	101	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0470	ug/L	97	(70-130)	30	4.4
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00267	ug/L	141	(50-150)		
MS2_202007150536	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0492	ug/L	101	(70-130)		
DUP_202007150539	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0491	ug/L	105	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0491	ug/L	105	(70-130)	30	0.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00267	ug/L	144	(50-150)		
MS2_202007150536	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0463	ug/L	99	(70-130)		
DUP_202007150539	d3-NMeFOSAA (I)			103	%	103	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MBLK	d3-NMeFOSAA (I)			102	%	102	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MS2_202007150536	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
DUP_202007150539	d5-NEtFOSAA (S)			89.4	%	89	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	88.4	%	88	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	85.3	%	85	(70-130)		
MBLK	d5-NEtFOSAA (S)			90.3	%	90	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	88.0	%	88	(70-130)		
MS2_202007150536	d5-NEtFOSAA (S)		100	84.0	%	84	(70-130)		
DUP_202007150539	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0492	ug/L	98	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0470	ug/L	94	(70-130)	30	4.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00256	ug/L	128	(50-150)		
MS2_202007150536	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0466	ug/L	93	(70-130)		
DUP_202007150539	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0472	ug/L	94	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0470	ug/L	94	(70-130)	30	0.43
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00271	ug/L	135	(50-150)		
MS2_202007150536	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0476	ug/L	95	(70-130)		
DUP_202007150539	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

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Report: 881682  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0471	ug/L	94	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0463	ug/L	93	(70-130)	30	1.7
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00272	ug/L	136	(50-150)		
MS2_202007150536	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0470	ug/L	94	(70-130)		
DUP_202007150539	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0480	ug/L	108	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0459	ug/L	104	(70-130)	30	4.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00259	ug/L	146	(50-150)		
MS2_202007150536	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0466	ug/L	105	(70-130)		
DUP_202007150539	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0531	ug/L	106	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0514	ug/L	103	(70-130)	30	3.1
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00278	ug/L	139	(50-150)		
MS2_202007150536	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0486	ug/L	97	(70-130)		
DUP_202007150539	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0493	ug/L	99	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0468	ug/L	94	(70-130)	30	5.2
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00254	ug/L	127	(50-150)		
MS2_202007150536	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0464	ug/L	93	(70-130)		
DUP_202007150539	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0553	ug/L	111	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0510	ug/L	102	(70-130)	30	8.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00299	ug/L	150	(50-150)		
MS2_202007150536	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0552	ug/L	110	(70-130)		
DUP_202007150539	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0494	ug/L	108	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0471	ug/L	103	(70-130)	30	4.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00267	ug/L	146	(50-150)		
MS2_202007150536	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0475	ug/L	104	(70-130)		
DUP_202007150539	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0543	ug/L	109	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0506	ug/L	101	(70-130)	30	7.0

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 881682  
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 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00293	ug/L	147	(50-150)		
MS2_202007150536	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0524	ug/L	105	(70-130)		
DUP_202007150539	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0516	ug/L	103	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0495	ug/L	99	(70-130)	30	4.3
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00283	ug/L	141	(50-150)		
MS2_202007150536	Perfluorononanoic acid (PFNA)	ND	0.05	0.0482	ug/L	97	(70-130)		
DUP_202007150539	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0475	ug/L	103	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0467	ug/L	101	(70-130)	30	1.7
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00254	ug/L	137	(50-150)		
MS2_202007150536	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0461	ug/L	100	(70-130)		
DUP_202007150539	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0491	ug/L	98	(70-130)	30	4.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00291	ug/L	145	(50-150)		
MS2_202007150536	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0511	ug/L	102	(70-130)		
DUP_202007150539	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0521	ug/L	104	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0503	ug/L	101	(70-130)	30	3.5
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00297	ug/L	148	(50-150)		
MS2_202007150536	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0507	ug/L	101	(70-130)		
DUP_202007150539	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0475	ug/L	95	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0472	ug/L	94	(70-130)	30	0.63
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00249	ug/L	125	(50-150)		
MS2_202007150536	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0460	ug/L	92	(70-130)		
DUP_202007150539	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0466	ug/L	93	(70-130)	30	6.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00259	ug/L	130	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202007150536	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0461	ug/L	92	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1263175 Analytical Batch: 1263915

Analysis Date: 07/23/2020

DUP_202007210809	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0475	ug/L	101	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0488	ug/L	104	(70-130)	30	2.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00198	ug/L	106	(50-150)		
MS_202007210808	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00195	ug/L	100	(50-150)		
DUP_202007210809	13C2-PFDA (S)			102	%	102	(70-130)		
LCS3	13C2-PFDA (S)		100	100	%	101	(70-130)		
LCS4	13C2-PFDA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFDA (S)			96.4	%	96	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.0	%	98	(70-130)		
MS_202007210808	13C2-PFDA (S)		100	95.6	%	96	(70-130)		
DUP_202007210809	13C2-PFHxA (S)			102	%	102	(70-130)		
LCS3	13C2-PFHxA (S)		100	106	%	106	(70-130)		
LCS4	13C2-PFHxA (S)		100	111	%	111	(70-130)		
MBLK	13C2-PFHxA (S)			104	%	104	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	106	%	107	(70-130)		
MS_202007210808	13C2-PFHxA (S)		100	104	%	104	(70-130)		
DUP_202007210809	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			111	%	111	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
MS_202007210808	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
DUP_202007210809	13C3-HFPO-DA (S)			98.0	%	98	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	96.5	%	96	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MBLK	13C3-HFPO-DA (S)			97.3	%	97	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	96.4	%	96	(70-130)		
MS_202007210808	13C3-HFPO-DA (S)		100	99.1	%	99	(70-130)		
DUP_202007210809	13C4-PFOS- IS#2 (I)			104	%	104	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			104	%	105	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
MS_202007210808	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
DUP_202007210809	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0500	ug/L	103	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0526	ug/L	108	(70-130)	30	4.9
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00221	ug/L	117	(50-150)		
MS_202007210808	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00228	ug/L	116	(50-150)		
DUP_202007210809	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0478	ug/L	103	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0492	ug/L	106	(70-130)	30	2.9
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00196	ug/L	106	(50-150)		
MS_202007210808	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00202	ug/L	106	(50-150)		
DUP_202007210809	d3-NMeFOSAA (I)			101	%	101	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MBLK	d3-NMeFOSAA (I)			103	%	103	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MS_202007210808	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
DUP_202007210809	d5-NEtFOSAA (S)			104	%	104	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	97.2	%	97	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MBLK	d5-NEtFOSAA (S)			103	%	103	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
MS_202007210808	d5-NEtFOSAA (S)		100	97.8	%	98	(70-130)		
DUP_202007210809	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0500	ug/L	100	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0533	ug/L	107	(70-130)	30	6.4
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00208	ug/L	104	(50-150)		
MS_202007210808	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00210	ug/L	105	(50-150)		
DUP_202007210809	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0492	ug/L	99	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0504	ug/L	101	(70-130)	30	2.2
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00207	ug/L	104	(50-150)		
MS_202007210808	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00214	ug/L	100	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007210809	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0499	ug/L	100	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0506	ug/L	101	(70-130)	30	1.4
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS_202007210808	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00208	ug/L	95	(50-150)		
DUP_202007210809	Perfluorobutanesulfonic acid (PFBS)	0.067		0.0653	ug/L		(0-30)	30	2.1
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0468	ug/L	106	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0482	ug/L	109	(70-130)	30	3.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00197	ug/L	112	(50-150)		
MS_202007210808	Perfluorobutanesulfonic acid (PFBS)	0.047	0.0018	0.0507	ug/L	<b>193</b>	(50-150)		
DUP_202007210809	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0518	ug/L	104	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0496	ug/L	99	(70-130)	30	4.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00204	ug/L	102	(50-150)		
MS_202007210808	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00211	ug/L	102	(50-150)		
DUP_202007210809	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0485	ug/L	97	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0500	ug/L	100	(70-130)	30	3.3
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00198	ug/L	99	(50-150)		
MS_202007210808	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00201	ug/L	97	(50-150)		
DUP_202007210809	Perfluoroheptanoic acid (PFHpA)	0.0025		0.00268	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0584	ug/L	117	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0593	ug/L	119	(70-130)	30	1.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00252	ug/L	126	(50-150)		
MS_202007210808	Perfluoroheptanoic acid (PFHpA)	0.011	0.002	0.0138	ug/L	123	(50-150)		
DUP_202007210809	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0470	ug/L	103	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0503	ug/L	110	(70-130)	30	6.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00213	ug/L	117	(50-150)		
MS_202007210808	Perfluorohexanesulfonic acid (PFHxS)	0.015	0.0018	0.0175	ug/L	118	(50-150)		
DUP_202007210809	Perfluorohexanoic acid (PFHxA)	0.20		0.205	ug/L		(0-30)	30	4.0
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0543	ug/L	109	(70-130)		

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 881682  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0558	ug/L	112	(70-130)	30	2.7
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00236	ug/L	118	(50-150)		
MS_202007210808	Perfluorohexanoic acid (PFHxA)	0.17	0.02	0.176	ug/L	126	(50-150)		
DUP_202007210809	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0516	ug/L	103	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0536	ug/L	107	(70-130)	30	3.8
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202007210808	Perfluorononanoic acid (PFNA)	ND	0.002	0.00230	ug/L	109	(50-150)		
DUP_202007210809	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0482	ug/L	104	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0504	ug/L	109	(70-130)	30	4.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00209	ug/L	113	(50-150)		
MS_202007210808	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00296	ug/L	109	(50-150)		
DUP_202007210809	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0547	ug/L	109	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0551	ug/L	110	(70-130)	30	0.73
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00243	ug/L	122	(50-150)		
MS_202007210808	Perfluorooctanoic acid (PFOA)	0.027	0.002	0.0285	ug/L	82	(50-150)		
DUP_202007210809	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0565	ug/L	113	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0530	ug/L	106	(70-130)	30	6.4
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00270	ug/L	135	(50-150)		
MS_202007210808	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00262	ug/L	108	(50-150)		
DUP_202007210809	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0484	ug/L	97	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0497	ug/L	99	(70-130)	30	2.4
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00201	ug/L	100	(50-150)		
MS_202007210808	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00202	ug/L	98	(50-150)		
DUP_202007210809	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0504	ug/L	101	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0514	ug/L	103	(70-130)	30	2.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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**Report:** 881682  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00202	ug/L	101	(50-150)		
MS_202007210808	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00198	ug/L	95	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 07/24/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_



**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 07/24/2020

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Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for  
Presence or Absence, Quantification of Total Coliform and E. Coli  
By Quantitray**

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 07/24/2020

Quant Report - Page 1 of 1

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## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 883523  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 883523  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **July 24, 2020 at 1257**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202007240318	GAC-1-20200724 Static ID: 537.1 @537.1	07/24/2020 0932
202007240319	GAC-2-20200724 Static ID: 537.1 @537.1	07/24/2020 0935
202007240320	GAC-3-20200724 Static ID: 537.1 @537.1	07/24/2020 0938
202007240321	GAC-4-20200724 Static ID: 537.1 @537.1	07/24/2020 0941
202007240322	IX-1-20200724 Static ID: 537.1 @537.1	07/24/2020 0944
202007240324	IX-2-20200724 @537.1	07/24/2020 0947
202007240325	IX-3-20200724 @537.1	07/24/2020 0950
202007240326	IX-4-20200724 @537.1	07/24/2020 0953
202007240327	LH-INF-20200724 @537.1 Chloride	07/24/2020 0956
	@ANIONS48 Sulfate	Alkalinity in CaCO3 units Total Organic Carbon
202007240328	GAC-5-20200724 @537.1	07/24/2020 1132
202007240329	GAC-6-20200724 @537.1	07/24/2020 1135
202007240330	GAC-7-20200724	07/24/2020 1138

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 883523  
Project: 0250000  
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

The following samples were received from you on **July 24, 2020 at 1257**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202007240331	GAC-8-20200724	07/24/2020 1141
	@537.1	
202007240332	IX-5-20200724	07/24/2020 1144
	@537.1	
202007240333	IX-6-20200724	07/24/2020 1147
	@537.1	
202007240334	IX-7-20200724	07/24/2020 1150
	@537.1	
202007240335	IX-8-20200724	07/24/2020 1153
	@537.1	
202007240336	MB-INF-20200724	07/24/2020 1156
	@537.1	
	Chloride	
	@ANIONS48	Alkalinity in CaCO3 units
	Sulfate	Total Organic Carbon
202007240337	MB-INF-DUP-20200724	07/24/2020 1159
	@537.1	
202007240340	FB-HOLD-20200724	07/24/2020 1200
	@537.1 FB	

#### Test Description

@537.1 -- EPA Method 537.1

@537.1 FB -- EPA Method 537.1

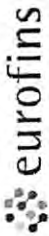
@ANIONS48 -- Nitrate, Nitrite by EPA 300.0



885723

<b>FROM:</b> GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com		<b>PROJECT NAME:</b> WRD Pilot <b>PROJECT CONTACT:</b> Miae Jeon GLOBAL ID:		<b>PROJECT NO.:</b> 5302 <b>LAB CONTACT:</b> Sophia Liang <b>SAMPLER(S): (PRINT)</b> RDT								
<b>LABORATORY:</b> Eurofins Eaton Analytical TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.										
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results												
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	GAC-1 - 20200724	7-24	0932	Water	2				X			
	GAC-2 - 20200724		0935	Water	2				X			
	GAC-3 - 20200724		0938	Water	2				X			
	GAC-4 - 20200724		0941	Water	2				X			
	IX-1 - 20200724		0944	Water	2				X			
	IX-2 - 20200724		0947	Water	2				X			
	IX-3 - 20200724		0950	Water	2				X			
	IX-4 - 20200724		0953	Water	2				X			
	LH-INF - 20200724		0956	Water	5				X			
	LH-INF-Buffer			Water	2							
	GAC-5 - 20200724	7-24	1132	Water	2				X			
	GAC-6 - 20200724		1135	Water	2				X			
	GAC-7 - 20200724		1138	Water	2				X			
	GAC-8 - 20200724		1141	Water	2				X			
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 7-24-2020		Time: 17:55						
Relinquished by: (Signature)		Received by: (Signature)		Date: 7/24/20 12:17		Time:						
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:						





Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 582523

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 630A (Observation=19.3 °C) (Corr.Factor=0.2 °C) (Final = 19.1 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)	2 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)
3 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)	4 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) VOA Headspace:  No Samples with Headspace:  Samples with Headspace (see below):   
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	>6mm	None/<6	>6mm	None/<6	>6mm	None/<6	>6mm	None/<6	Bottle #	mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
	<u>ly</u>	Eurofins Eaton Analytical	<u>7/24/20</u>	<u>12:57</u>

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 883523  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	<b>202007240325</b>	<b><u>IX-3-20200724</u></b>				
07/29/2020 16:37	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
	<b>202007240327</b>	<b><u>LH-INF-20200724</u></b>				
07/30/2020 15:18	Alkalinity in CaCO3 units		200		mg/L	2.0
07/24/2020 16:16	Chloride		110	250	mg/L	2.5
07/24/2020 16:16	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
07/24/2020 16:16	Nitrate as NO3 (calc)		12	45	mg/L	2.2
07/29/2020 16:58	Perfluorobutanesulfonic acid (PFBS)		0.0060		ug/L	0.0020
07/29/2020 16:58	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
07/29/2020 16:58	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
07/29/2020 16:58	Perfluorononanoic acid (PFNA)		0.0028		ug/L	0.0020
07/29/2020 16:58	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
07/29/2020 16:58	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
07/24/2020 16:16	Sulfate		180	250	mg/L	2.5
07/24/2020 16:16	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
07/29/2020 16:36	Total Organic Carbon		0.59		mg/L	0.30
	<b>202007240333</b>	<b><u>IX-6-20200724</u></b>				
07/29/2020 17:36	Perfluorohexanoic acid (PFHxA)		0.0028		ug/L	0.0020
	<b>202007240334</b>	<b><u>IX-7-20200724</u></b>				
07/29/2020 17:46	Perfluorohexanoic acid (PFHxA)		0.0049		ug/L	0.0020
	<b>202007240335</b>	<b><u>IX-8-20200724</u></b>				
07/29/2020 17:55	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
	<b>202007240336</b>	<b><u>MB-INF-20200724</u></b>				
07/28/2020 15:02	Alkalinity in CaCO3 units		170		mg/L	2.0
07/24/2020 16:54	Chloride		52	250	mg/L	2.5
07/24/2020 16:54	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
07/24/2020 16:54	Nitrate as NO3 (calc)		11	45	mg/L	2.2
07/29/2020 18:05	Perfluorobutanesulfonic acid (PFBS)		0.0088		ug/L	0.0020
07/29/2020 18:05	Perfluoroheptanoic acid (PFHpA)		0.0034		ug/L	0.0020
07/29/2020 18:05	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
07/29/2020 18:05	Perfluorohexanoic acid (PFHxA)		0.0044		ug/L	0.0020
07/29/2020 18:05	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
07/29/2020 18:05	Perfluorooctanesulfonic acid (PFOS)		0.035		ug/L	0.0020
07/29/2020 18:05	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
07/24/2020 16:54	Sulfate		79	250	mg/L	2.5

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
07/24/2020 16:54	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
07/29/2020 16:52	Total Organic Carbon		0.77		mg/L	0.30
	<b>202007240337</b>	<b><u>MB-INF-DUP-20200724</u></b>				
07/29/2020 03:16	Perfluorobutanesulfonic acid (PFBS)		0.0090		ug/L	0.0020
07/29/2020 03:16	Perfluoroheptanoic acid (PFHpA)		0.0033		ug/L	0.0020
07/29/2020 03:16	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
07/29/2020 03:16	Perfluorohexanoic acid (PFHxA)		0.0045		ug/L	0.0020
07/29/2020 03:16	Perfluorononanoic acid (PFNA)		0.0035		ug/L	0.0020
07/29/2020 03:16	Perfluorooctanesulfonic acid (PFOS)		0.036		ug/L	0.0020
07/29/2020 03:16	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20200724 (202007240318)</b>					<b>Sampled on 07/24/2020 0932</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	13C2-PFDA	99	%		1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	13C2-PFHxA	106	%		1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	96	%		1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	96	%		1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	d5-NEFOSAA	97	%		1

<b>GAC-2-20200724 (202007240319)</b>					<b>Sampled on 07/24/2020 0935</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	13C2-PFDA	93	%		1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	13C2-PFHxA	100	%		1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	92	%		1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	94	%		1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**GAC-3-20200724 (202007240320)**

Sampled on 07/24/2020 0938

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



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 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	13C2-PFDA	96	%		1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	13C2-PFHxA	103	%		1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	94	%		1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	100	%		1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**GAC-4-20200724 (202007240321)**

Sampled on 07/24/2020 0941

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	13C2-PFDA	96	%		1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	13C2-PFHxA	102	%		1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	96	%		1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**IX-1-20200724 (202007240322)**

Static ID: 537.1

**Sampled on 07/24/2020 0944**

**EPA 537.1 - EPA Method 537.1**

07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	13C2-PFDA	92	%		1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	13C2-PFHxA	102	%		1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	92	%		1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	100	%		1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**IX-2-20200724 (202007240324)**

**Sampled on 07/24/2020 0947**

**EPA 537.1 - EPA Method 537.1**

07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	13C2-PFDA	98	%		1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	13C2-PFHxA	110	%		1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	100	%		1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	100	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	99	%		1
<b>IX-3-20200724 (202007240325)</b>					<b>Sampled on 07/24/2020 0950</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	13C2-PFDA	100	%		1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	13C2-PFHxA	104	%		1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	99	%		1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	102	%		1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	99	%		1

<b>IX-4-20200724 (202007240326)</b>					<b>Sampled on 07/24/2020 0953</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	13C2-PFDA	95	%		1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	13C2-PFHxA	106	%		1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	102	%		1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**LH-INF-20200724 (202007240327)**

**Sampled on 07/24/2020 0956**

**SM 5310C - Total Organic Carbon**

07/29/20 16:36	1264923	(SM 5310C)	Total Organic Carbon	0.59	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

07/24/20 16:16	1263925	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
07/24/20 16:16	1263925	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
07/24/20 16:16	1263925	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
07/24/20 16:16	1263925	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

07/24/20 16:16	1263928	(EPA 300.0)	Chloride	110	mg/L	2.5	5
07/24/20 16:16	1263928	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

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 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0060	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0028	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	13C2-PFDA	92	%		1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	13C2-PFHxA	102	%		1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	94	%		1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	104	%		1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	100	%		1

**SM 2320B - Alkalinity in CaCO3 units**

07/30/20 15:18	1264925	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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**GAC-5-20200724 (202007240328)**

Sampled on 07/24/2020 1132

**EPA 537.1 - EPA Method 537.1**

07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	13C2-PFDA	100	%		1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	13C2-PFHxA	106	%		1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	99	%		1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	103	%		1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**GAC-6-20200724 (202007240329)**

Sampled on 07/24/2020 1135

**EPA 537.1 - EPA Method 537.1**

07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	13C2-PFDA	97	%		1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	13C2-PFHxA	104	%		1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	95	%		1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	100	%		1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**GAC-7-20200724 (202007240330)**

Sampled on 07/24/2020 1138

**EPA 537.1 - EPA Method 537.1**

07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	13C2-PFDA	92	%		1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	13C2-PFHxA	103	%		1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	95	%		1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	91	%		1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**GAC-8-20200724 (202007240331)**

Sampled on 07/24/2020 1141

**EPA 537.1 - EPA Method 537.1**

07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	13C2-PFDA	94	%		1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	13C2-PFHxA	96	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	91	%		1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	106	%		1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**IX-5-20200724 (202007240332)**

**Sampled on 07/24/2020 1144**

**EPA 537.1 - EPA Method 537.1**

07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	13C2-PFDA	95	%		1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	13C2-PFHxA	100	%		1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	92	%		1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	96	%		1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	92	%		1

**IX-6-20200724 (202007240333)**

**Sampled on 07/24/2020 1147**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 537.1 - EPA Method 537.1</b>									
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0028	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	13C2-PFDA	96	%		1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	13C2-PFHxA	104	%		1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	93	%		1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	107	%		1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	96	%		1

**IX-7-20200724 (202007240334)**

Sampled on 07/24/2020 1150

<b>EPA 537.1 - EPA Method 537.1</b>									
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0049	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	13C2-PFDA	97	%		1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	13C2-PFHxA	103	%		1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	94	%		1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	105	%		1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**IX-8-20200724 (202007240335)**

Sampled on 07/24/2020 1153

**EPA 537.1 - EPA Method 537.1**

07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

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Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	13C2-PFDA	95	%		1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	13C2-PFHxA	99	%		1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	92	%		1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	106	%		1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**MB-INF-20200724 (202007240336)**

Sampled on 07/24/2020 1156

**SM 5310C - Total Organic Carbon**

07/29/20 16:52	1264923	(SM 5310C)	Total Organic Carbon	0.77	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

07/24/20 16:54	1263925	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
07/24/20 16:54	1263925	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
07/24/20 16:54	1263925	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
07/24/20 16:54	1263925	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

07/24/20 16:54	1263928	(EPA 300.0)	Chloride	52	mg/L	2.5	5
07/24/20 16:54	1263928	(EPA 300.0)	Sulfate	79	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

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Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0088	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0034	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0044	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.035	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	13C2-PFDA	100	%		1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	13C2-PFHxA	102	%		1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	91	%		1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	101	%		1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	96	%		1

**SM 2320B - Alkalinity in CaCO3 units**

07/28/20 15:02	1264477	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
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**MB-INF-DUP-20200724 (202007240337)**

**Sampled on 07/24/2020 1159**

**EPA 537.1 - EPA Method 537.1**

07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	4,8-dioxo-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0090	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

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Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0045	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0035	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.036	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	13C2-PFDA	89	%		1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	13C2-PFHxA	91	%		1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	13C2-PFOA- IS#1	114	%		1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	13C3-HFPO-DA	88	%		1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	d3-NMeFOSAA	112	%		1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	d5-NEtFOSAA	89	%		1

**FB-HOLD-20200724 (202007240340)**

Sampled on 07/24/2020 1200

**EPA 537.1 - EPA Method 537.1**

07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

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**Report:** 883523  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	13C2-PFDA	97	%		1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	13C2-PFHxA	101	%		1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	13C3-HFPO-DA	91	%		1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	d3-NMeFOSAA	114	%		1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	d5-NEtFOSAA	95	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



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**Report:** 883523  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

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**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1263925**

202007240327 LH-INF-20200724  
 202007240336 MB-INF-20200724

**Analysis Date: 07/24/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1263928**

202007240327 LH-INF-20200724  
 202007240336 MB-INF-20200724

**Analysis Date: 07/24/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Alkalinity in CaCO3 units**

**Analytical Batch: 1264477**

202007240336 MB-INF-20200724

**Analysis Date: 07/28/2020**

Analyzed by: ZB2Z

**EPA Method 537.1**

**Prep Batch: 1264381 Analytical Batch: 1264899**

202007240337 MB-INF-DUP-20200724

**Analysis Date: 07/29/2020**

Analyzed by: KAM

**Total Organic Carbon**

**Analytical Batch: 1264923**

202007240327 LH-INF-20200724  
 202007240336 MB-INF-20200724

**Analysis Date: 07/29/2020**

Analyzed by: ZS6I  
 Analyzed by: ZS6I

**Alkalinity in CaCO3 units**

**Analytical Batch: 1264925**

202007240327 LH-INF-20200724

**Analysis Date: 07/30/2020**

Analyzed by: ZB2Z

**EPA Method 537.1**

**Prep Batch: 1264198 Analytical Batch: 1265050**

202007240318 GAC-1-20200724  
 202007240319 GAC-2-20200724  
 202007240320 GAC-3-20200724  
 202007240321 GAC-4-20200724  
 202007240322 IX-1-20200724  
 202007240324 IX-2-20200724  
 202007240325 IX-3-20200724  
 202007240326 IX-4-20200724  
 202007240327 LH-INF-20200724  
 202007240328 GAC-5-20200724  
 202007240329 GAC-6-20200724  
 202007240330 GAC-7-20200724  
 202007240331 GAC-8-20200724  
 202007240332 IX-5-20200724  
 202007240333 IX-6-20200724  
 202007240334 IX-7-20200724  
 202007240335 IX-8-20200724  
 202007240336 MB-INF-20200724

**Analysis Date: 07/29/2020**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
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 Analyzed by: KAM



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Laboratory QC Summary

**Report:** 883523  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

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**EPA Method 537.1**

**Prep Batch: 1265044 Analytical Batch: 1265753**  
202007240340 FB-HOLD-20200724

**Analysis Date: 07/31/2020**  
Analyzed by: KAM

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Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1263925</b>					<b>Analysis Date: 07/24/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	102	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.55	mg/L	102	(90-110)	20	0.39
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0486	mg/L	97	(50-150)		
MS_202007240026	Nitrate as Nitrogen by IC	1.6	1.3	2.94	mg/L	110	(80-120)		
MS_202007240327	Nitrate as Nitrogen by IC	2.8	6.5	9.62	mg/L	109	(80-120)		
MSD_202007240026	Nitrate as Nitrogen by IC	1.6	1.3	2.93	mg/L	110	(80-120)	20	0.24
MSD_202007240327	Nitrate as Nitrogen by IC	2.8	6.5	9.62	mg/L	109	(80-120)	20	0.055
LCS1	Nitrite Nitrogen by IC		1	0.988	mg/L	99	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.988	mg/L	99	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0438	mg/L	88	(50-150)		
MS_202007240026	Nitrite Nitrogen by IC	ND	0.5	0.507	mg/L	101	(80-120)		
MS_202007240327	Nitrite Nitrogen by IC	ND	2.5	2.45	mg/L	98	(80-120)		
MSD_202007240026	Nitrite Nitrogen by IC	ND	0.5	0.507	mg/L	101	(80-120)	20	0.020
MSD_202007240327	Nitrite Nitrogen by IC	ND	2.5	2.44	mg/L	98	(80-120)	20	0.30

<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1263928</b>					<b>Analysis Date: 07/24/2020</b>				
LCS1	Chloride		25	26.4	mg/L	105	(90-110)		
LCS2	Chloride		25	26.4	mg/L	106	(90-110)	20	0.38
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.454	mg/L	91	(50-150)		
MS_202007240026	Chloride	11	13	25.5	mg/L	117	(80-120)		
MS_202007240327	Chloride	110	65	179	mg/L	111	(80-120)		
MSD_202007240026	Chloride	11	13	25.4	mg/L	117	(80-120)	20	0.13
MSD_202007240327	Chloride	110	65	179	mg/L	110	(80-120)	20	0.022
LCS1	Sulfate		50	51.7	mg/L	103	(90-110)		
LCS2	Sulfate		50	51.8	mg/L	104	(90-110)	20	0.39
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.987	mg/L	99	(50-150)		
MRLLW	Sulfate		0.25	0.247	mg/L	99	(50-150)		
MS_202007240026	Sulfate	6.0	25	33.8	mg/L	111	(80-120)		
MS_202007240327	Sulfate	180	125	317	mg/L	111	(80-120)		
MSD_202007240026	Sulfate	6.0	25	33.8	mg/L	111	(80-120)	20	0.004

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202007240327	Sulfate	180	125	316	mg/L	110	(80-120)	20	0.27

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1264477

Analysis Date: 07/28/2020

LCS1	Alkalinity in CaCO3 units		100	101	mg/L	101	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.6	mg/L	99	(90-110)	20	2.3
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.98	mg/L	99	(50-150)		
MS_202007270386	Alkalinity in CaCO3 units	160	100	256	mg/L	97	(80-120)		
MSD_202007270386	Alkalinity in CaCO3 units	160	100	255	mg/L	96	(80-120)	20	0.31

EPA Method 537.1 by EPA 537.1

Prep Batch: 1264381 Analytical Batch: 1264899

Analysis Date: 07/28/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0240	ug/L	102	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0234	ug/L	99	(70-130)	30	2.5
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00186	ug/L	99	(50-150)		
MS_202006190292	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00194	ug/L	103	(50-150)		
MSD_202006190292	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00192	ug/L	102	(50-150)	50	1.0
LCS1	13C2-PFDA (S)		100	97.3	%	97	(70-130)		
LCS2	13C2-PFDA (S)		100	94.7	%	95	(70-130)		
MBLK	13C2-PFDA (S)			94.0	%	94	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	92.8	%	93	(70-130)		
MS_202006190292	13C2-PFDA (S)		100	94.7	%	95	(70-130)		
MSD_202006190292	13C2-PFDA (S)		100	93.9	%	94	(70-130)		
LCS1	13C2-PFHxA (S)		100	101	%	101	(70-130)		
LCS2	13C2-PFHxA (S)		100	97.5	%	98	(70-130)		
MBLK	13C2-PFHxA (S)			98.1	%	98	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MS_202006190292	13C2-PFHxA (S)		100	95.6	%	96	(70-130)		
MSD_202006190292	13C2-PFHxA (S)		100	98.2	%	98	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			109	%	109	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
MS_202006190292	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
MSD_202006190292	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	99.3	%	99	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	95.2	%	95	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C3-HFPO-DA (S)			93.3	%	93	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	94.9	%	95	(70-130)		
MS_202006190292	13C3-HFPO-DA (S)		100	93.0	%	93	(70-130)		
MSD_202006190292	13C3-HFPO-DA (S)		100	93.9	%	94	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
MS_202006190292	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
MSD_202006190292	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0263	ug/L	111	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0257	ug/L	109	(70-130)	30	2.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00228	ug/L	120	(50-150)		
MS_202006190292	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00215	ug/L	113	(50-150)		
MSD_202006190292	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00216	ug/L	114	(50-150)	50	0.84
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0256	ug/L	110	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0250	ug/L	107	(70-130)	30	2.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00199	ug/L	107	(50-150)		
MS_202006190292	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00203	ug/L	109	(50-150)		
MSD_202006190292	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00199	ug/L	107	(50-150)	50	2.1
LCS1	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
MBLK	d3-NMeFOSAA (I)			109	%	109	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
MS_202006190292	d3-NMeFOSAA (I)		100	111	%	111	(50-150)		
MSD_202006190292	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	92.4	%	92	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	94.1	%	94	(70-130)		
MBLK	d5-NEtFOSAA (S)			92.6	%	93	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	90.3	%	90	(70-130)		
MS_202006190292	d5-NEtFOSAA (S)		100	91.0	%	91	(70-130)		
MSD_202006190292	d5-NEtFOSAA (S)		100	91.4	%	91	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0275	ug/L	110	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0259	ug/L	104	(70-130)	30	6.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00210	ug/L	105	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 883523  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202006190292	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00219	ug/L	109	(50-150)		
MSD_202006190292	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00224	ug/L	112	(50-150)	50	2.3
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0260	ug/L	104	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0259	ug/L	103	(70-130)	30	0.39
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00212	ug/L	106	(50-150)		
MS_202006190292	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202006190292	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00216	ug/L	108	(50-150)	50	0.22
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0274	ug/L	109	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0270	ug/L	108	(70-130)	30	1.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00219	ug/L	110	(50-150)		
MS_202006190292	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00220	ug/L	110	(50-150)		
MSD_202006190292	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00224	ug/L	112	(50-150)	50	2.0
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0252	ug/L	114	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0244	ug/L	110	(70-130)	30	3.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00204	ug/L	116	(50-150)		
MS_202006190292	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00308	ug/L	112	(50-150)		
MSD_202006190292	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00313	ug/L	114	(50-150)	50	1.4
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0280	ug/L	112	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0272	ug/L	109	(70-130)	30	2.9
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00224	ug/L	112	(50-150)		
MS_202006190292	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00222	ug/L	111	(50-150)		
MSD_202006190292	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00219	ug/L	110	(50-150)	50	1.2
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0253	ug/L	101	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0252	ug/L	101	(70-130)	30	0.40
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00195	ug/L	98	(50-150)		
MS_202006190292	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00210	ug/L	105	(50-150)		
MSD_202006190292	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00204	ug/L	102	(50-150)	50	2.8
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0294	ug/L	118	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0290	ug/L	116	(70-130)	30	1.4
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00254	ug/L	127	(50-150)		
MS_202006190292	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00262	ug/L	119	(50-150)		
MSD_202006190292	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00270	ug/L	123	(50-150)	50	3.2

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0261	ug/L	115	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0251	ug/L	110	(70-130)	30	3.9
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00206	ug/L	113	(50-150)		
MS_202006190292	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00211	ug/L	115	(50-150)		
MSD_202006190292	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00209	ug/L	115	(50-150)	50	0.77
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0289	ug/L	116	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0279	ug/L	112	(70-130)	30	3.5
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00246	ug/L	123	(50-150)		
MS_202006190292	Perfluorohexanoic acid (PFHxA)	0.0033	0.002	0.00562	ug/L	117	(50-150)		
MSD_202006190292	Perfluorohexanoic acid (PFHxA)	0.0033	0.002	0.00559	ug/L	116	(50-150)	50	0.50
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0291	ug/L	116	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0280	ug/L	112	(70-130)	30	3.9
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00240	ug/L	120	(50-150)		
MS_202006190292	Perfluorononanoic acid (PFNA)	ND	0.002	0.00233	ug/L	117	(50-150)		
MSD_202006190292	Perfluorononanoic acid (PFNA)	ND	0.002	0.00231	ug/L	115	(50-150)	50	0.91
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0267	ug/L	115	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0258	ug/L	111	(70-130)	30	3.4
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00218	ug/L	118	(50-150)		
MS_202006190292	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00216	ug/L	112	(50-150)		
MSD_202006190292	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00216	ug/L	112	(50-150)	50	0.059
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0288	ug/L	115	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0277	ug/L	111	(70-130)	30	3.9
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00249	ug/L	124	(50-150)		
MS_202006190292	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00236	ug/L	111	(50-150)		
MSD_202006190292	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00237	ug/L	112	(50-150)	50	0.36
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0266	ug/L	107	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0259	ug/L	104	(70-130)	30	2.7
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00225	ug/L	112	(50-150)		
MS_202006190292	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00228	ug/L	108	(50-150)		
MSD_202006190292	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00227	ug/L	108	(50-150)	50	0.34
LCS1	Perfluorotridecanoic acid (PFTTrDA)		0.025	0.0264	ug/L	105	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTTrDA)		0.025	0.0266	ug/L	106	(70-130)	30	0.76

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00203	ug/L	101	(50-150)		
MS_202006190292	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00210	ug/L	105	(50-150)		
MSD_202006190292	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00209	ug/L	104	(50-150)	50	0.46
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0259	ug/L	104	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0261	ug/L	104	(70-130)	30	0.77
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202006190292	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00214	ug/L	107	(50-150)		
MSD_202006190292	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00215	ug/L	108	(50-150)	50	0.41

Total Organic Carbon by SM 5310C

Analytical Batch: 1264923

Analysis Date: 07/29/2020

LCS1	Total Organic Carbon		5	4.95	mg/L	99	(90-110)		
LCS2	Total Organic Carbon		5	4.98	mg/L	100	(90-110)	20	0.60
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.239	mg/L	119	(50-150)		
MS_202007211190	Total Organic Carbon	0.74	4	5.73	mg/L	<b>125</b>	(80-120)		
MS2_202007280272	Total Organic Carbon	0.40	2	2.29	mg/L	95	(80-120)		
MSD_202007211190	Total Organic Carbon	0.74	4	6.28	mg/L	<b>138</b>	(80-120)	20	9.2
MSD2_202007280272	Total Organic Carbon	0.40	2	2.30	mg/L	95	(80-120)	20	0.26

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1264925

Analysis Date: 07/30/2020

LCS1	Alkalinity in CaCO3 units		100	104	mg/L	105	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.2	mg/L	99	(90-110)	20	5.7
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.88	mg/L	94	(50-150)		
MS_202007290174	Alkalinity in CaCO3 units	120	100	222	mg/L	97	(80-120)		
MS_202007290270	Alkalinity in CaCO3 units	75	100	178	mg/L	103	(80-120)		
MSD_202007290174	Alkalinity in CaCO3 units	120	100	222	mg/L	97	(80-120)	20	0.072
MSD_202007290270	Alkalinity in CaCO3 units	75	100	178	mg/L	103	(80-120)	20	0.039

EPA Method 537.1 by EPA 537.1

Prep Batch: 1264198 Analytical Batch: 1265050

Analysis Date: 07/29/2020

DUP_202007240332	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0495	ug/L	105	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0493	ug/L	105	(70-130)	30	0.41
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00196	ug/L	104	(50-150)		
MS1_202007240330	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0260	ug/L	110	(70-130)		
DUP_202007240332	13C2-PFDA (S)			97.8	%	98	(70-130)		
LCS3	13C2-PFDA (S)		100	99.2	%	99	(70-130)		
LCS4	13C2-PFDA (S)		100	98.6	%	99	(70-130)		
MBLK	13C2-PFDA (S)			102	%	102	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.7	%	99	(70-130)		
MS1_202007240330	13C2-PFDA (S)		100	105	%	105	(70-130)		
DUP_202007240332	13C2-PFHxA (S)			106	%	106	(70-130)		
LCS3	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS4	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFHxA (S)			102	%	102	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	94.2	%	94	(70-130)		
MS1_202007240330	13C2-PFHxA (S)		100	108	%	108	(70-130)		
DUP_202007240332	13C2-PFOA- IS#1 (I)			99.4	%	99	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.5	%	98	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			99.7	%	100	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	99.8	%	100	(50-150)		
MS1_202007240330	13C2-PFOA- IS#1 (I)		100	99.2	%	99	(50-150)		
DUP_202007240332	13C3-HFPO-DA (S)			95.8	%	96	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	98.8	%	99	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	98.3	%	98	(70-130)		
MBLK	13C3-HFPO-DA (S)			99.5	%	100	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	92.6	%	93	(70-130)		
MS1_202007240330	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
DUP_202007240332	13C4-PFOS- IS#2 (I)			93.9	%	94	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	96.5	%	97	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	95.4	%	95	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			97.7	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	95.6	%	96	(50-150)		
MS1_202007240330	13C4-PFOS- IS#2 (I)		100	93.3	%	93	(50-150)		
DUP_202007240332	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0493	ug/L	102	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0483	ug/L	100	(70-130)	30	2.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00198	ug/L	105	(50-150)		
MS1_202007240330	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0257	ug/L	109	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 883523  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007240332	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0495	ug/L	106	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0482	ug/L	103	(70-130)	30	2.7
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00198	ug/L	106	(50-150)		
MS1_202007240330	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0252	ug/L	108	(70-130)		
DUP_202007240332	d3-NMeFOSAA (I)			94.4	%	94	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	96.1	%	96	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	95.4	%	95	(50-150)		
MBLK	d3-NMeFOSAA (I)			94.1	%	94	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	95.0	%	95	(50-150)		
MS1_202007240330	d3-NMeFOSAA (I)		100	93.9	%	94	(50-150)		
DUP_202007240332	d5-NEtFOSAA (S)			96.6	%	97	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	98.3	%	98	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	99.5	%	99	(70-130)		
MBLK	d5-NEtFOSAA (S)			98.7	%	99	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	103	%	103	(70-130)		
MS1_202007240330	d5-NEtFOSAA (S)		100	103	%	103	(70-130)		
DUP_202007240332	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0500	ug/L	100	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0485	ug/L	97	(70-130)	30	3.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00176	ug/L	88	(50-150)		
MS1_202007240330	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0258	ug/L	103	(70-130)		
DUP_202007240332	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0523	ug/L	105	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0522	ug/L	104	(70-130)	30	0.19
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00214	ug/L	107	(50-150)		
MS1_202007240330	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0268	ug/L	107	(70-130)		
DUP_202007240332	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0520	ug/L	104	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0515	ug/L	103	(70-130)	30	0.97
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	104	(50-150)		
MS1_202007240330	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0269	ug/L	108	(70-130)		
DUP_202007240332	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0440	ug/L	100	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0462	ug/L	104	(70-130)	30	4.9
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00166	ug/L	94	(50-150)		
MS1_202007240330	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0247	ug/L	112	(70-130)		
DUP_202007240332	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0498	ug/L	100	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0481	ug/L	96	(70-130)	30	3.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00206	ug/L	103	(50-150)		
MS1_202007240330	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0258	ug/L	103	(70-130)		
DUP_202007240332	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0492	ug/L	99	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0489	ug/L	98	(70-130)	30	0.61
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00195	ug/L	98	(50-150)		
MS1_202007240330	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0258	ug/L	103	(70-130)		
DUP_202007240332	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0561	ug/L	112	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0555	ug/L	111	(70-130)	30	1.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00223	ug/L	112	(50-150)		
MS1_202007240330	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0288	ug/L	115	(70-130)		
DUP_202007240332	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0502	ug/L	110	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0497	ug/L	109	(70-130)	30	1.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00202	ug/L	111	(50-150)		
MS1_202007240330	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0265	ug/L	116	(70-130)		
DUP_202007240332	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0514	ug/L	103	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0520	ug/L	104	(70-130)	30	1.2
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00192	ug/L	96	(50-150)		
MS1_202007240330	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0271	ug/L	108	(70-130)		
DUP_202007240332	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0513	ug/L	103	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0506	ug/L	101	(70-130)	30	1.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00205	ug/L	102	(50-150)		
MS1_202007240330	Perfluorononanoic acid (PFNA)	ND	0.025	0.0264	ug/L	106	(70-130)		
DUP_202007240332	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0497	ug/L	107	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0489	ug/L	106	(70-130)	30	1.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00202	ug/L	109	(50-150)		
MS1_202007240330	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0255	ug/L	110	(70-130)		
DUP_202007240332	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0535	ug/L	107	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0517	ug/L	103	(70-130)	30	3.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00215	ug/L	108	(50-150)		
MS1_202007240330	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0278	ug/L	111	(70-130)		
DUP_202007240332	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0578	ug/L	116	(70-130)	30	9.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00216	ug/L	108	(50-150)		
MS1_202007240330	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0309	ug/L	123	(70-130)		
DUP_202007240332	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0484	ug/L	97	(70-130)	30	2.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00200	ug/L	100	(50-150)		
MS1_202007240330	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0257	ug/L	103	(70-130)		
DUP_202007240332	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0473	ug/L	95	(70-130)	30	5.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00203	ug/L	102	(50-150)		
MS1_202007240330	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0253	ug/L	101	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1265044 Analytical Batch: 1265753

Analysis Date: 07/31/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0469	ug/L	100	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0489	ug/L	104	(70-130)	30	4.2
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00200	ug/L	106	(50-150)		
MS1_202007290407	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0246	ug/L	105	(70-130)		
MSD1_202007290407	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0256	ug/L	109	(70-130)	30	3.9
LCS3	13C2-PFDA (S)		100	102	%	102	(70-130)		
LCS4	13C2-PFDA (S)		100	98.0	%	98	(70-130)		
MBLK	13C2-PFDA (S)			102	%	102	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.8	%	99	(70-130)		
MS1_202007290407	13C2-PFDA (S)		100	98.2	%	98	(70-130)		
MSD1_202007290407	13C2-PFDA (S)		100	97.4	%	97	(70-130)		
LCS3	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS4	13C2-PFHxA (S)		100	104	%	104	(70-130)		
MBLK	13C2-PFHxA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MS1_202007290407	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MSD1_202007290407	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			109	%	109	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MS1_202007290407	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
MSD1_202007290407	13C2-PFOA- IS#1 (I)		100	108	%	109	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	99.9	%	100	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	95.3	%	95	(70-130)		
MBLK	13C3-HFPO-DA (S)			98.4	%	98	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	93.9	%	94	(70-130)		
MS1_202007290407	13C3-HFPO-DA (S)		100	94.9	%	95	(70-130)		
MSD1_202007290407	13C3-HFPO-DA (S)		100	97.0	%	97	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			105	%	105	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
MS1_202007290407	13C4-PFOS- IS#2 (I)		100	108	%	108	(50-150)		
MSD1_202007290407	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0500	ug/L	103	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0478	ug/L	99	(70-130)	30	4.5
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00207	ug/L	110	(50-150)		
MS1_202007290407	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0254	ug/L	108	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD1_202007290407	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0254	ug/L	107	(70-130)	30	0.18
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0471	ug/L	101	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0472	ug/L	101	(70-130)	30	0.21
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00192	ug/L	103	(50-150)		
MS1_202007290407	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0239	ug/L	103	(70-130)		
MSD1_202007290407	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0250	ug/L	108	(70-130)	30	4.5
LCS3	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MBLK	d3-NMeFOSAA (I)			104	%	104	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MS1_202007290407	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
MSD1_202007290407	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	99.4	%	99	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	97.7	%	98	(70-130)		
MBLK	d5-NEtFOSAA (S)			99.4	%	99	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	99.8	%	100	(70-130)		
MS1_202007290407	d5-NEtFOSAA (S)		100	95.9	%	96	(70-130)		
MSD1_202007290407	d5-NEtFOSAA (S)		100	97.7	%	98	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0510	ug/L	102	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0488	ug/L	98	(70-130)	30	4.4
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00199	ug/L	100	(50-150)		
MS1_202007290407	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0245	ug/L	98	(70-130)		
MSD1_202007290407	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0254	ug/L	102	(70-130)	30	3.6
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0510	ug/L	102	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0505	ug/L	101	(70-130)	30	0.99
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	108	(50-150)		
MS1_202007290407	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0259	ug/L	104	(70-130)		
MSD1_202007290407	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0254	ug/L	102	(70-130)	30	2.0
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0532	ug/L	106	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0507	ug/L	101	(70-130)	30	4.8
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00221	ug/L	111	(50-150)		
MS1_202007290407	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0265	ug/L	106	(70-130)		
MSD1_202007290407	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0256	ug/L	102	(70-130)	30	3.4
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0459	ug/L	104	(70-130)		

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 883523  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0459	ug/L	104	(70-130)	30	0.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00194	ug/L	110	(50-150)		
MS1_202007290407	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0243	ug/L	110	(70-130)		
MSD1_202007290407	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0247	ug/L	112	(70-130)	30	1.7
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0514	ug/L	103	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0493	ug/L	99	(70-130)	30	4.2
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00210	ug/L	105	(50-150)		
MS1_202007290407	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0252	ug/L	101	(70-130)		
MSD1_202007290407	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0263	ug/L	105	(70-130)	30	4.3
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0483	ug/L	97	(70-130)	30	2.9
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00212	ug/L	106	(50-150)		
MS1_202007290407	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0253	ug/L	101	(70-130)		
MSD1_202007290407	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0248	ug/L	99	(70-130)	30	2.1
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0566	ug/L	113	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0537	ug/L	107	(70-130)	30	5.3
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00226	ug/L	113	(50-150)		
MS1_202007290407	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0281	ug/L	112	(70-130)		
MSD1_202007290407	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0284	ug/L	114	(70-130)	30	1.0
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0487	ug/L	107	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0490	ug/L	108	(70-130)	30	0.61
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00202	ug/L	111	(50-150)		
MS1_202007290407	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0251	ug/L	110	(70-130)		
MSD1_202007290407	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0259	ug/L	114	(70-130)	30	3.2
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0539	ug/L	108	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0514	ug/L	103	(70-130)	30	4.5
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00212	ug/L	106	(50-150)		
MS1_202007290407	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0257	ug/L	102	(70-130)		
MSD1_202007290407	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0270	ug/L	108	(70-130)	30	5.0
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0514	ug/L	103	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0504	ug/L	101	(70-130)	30	2.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 883523  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00215	ug/L	108	(50-150)		
MS1_202007290407	Perfluorononanoic acid (PFNA)	ND	0.025	0.0262	ug/L	105	(70-130)		
MSD1_202007290407	Perfluorononanoic acid (PFNA)	ND	0.025	0.0262	ug/L	105	(70-130)	30	0.22
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0478	ug/L	103	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0481	ug/L	104	(70-130)	30	0.63
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00195	ug/L	106	(50-150)		
MS1_202007290407	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0240	ug/L	104	(70-130)		
MSD1_202007290407	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0254	ug/L	110	(70-130)	30	5.5
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0522	ug/L	104	(70-130)	30	1.9
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00232	ug/L	116	(50-150)		
MS1_202007290407	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0267	ug/L	107	(70-130)		
MSD1_202007290407	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0267	ug/L	107	(70-130)	30	0.15
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0610	ug/L	122	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0623	ug/L	125	(70-130)	30	2.1
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00262	ug/L	131	(50-150)		
MS1_202007290407	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0315	ug/L	126	(70-130)		
MSD1_202007290407	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0303	ug/L	121	(70-130)	30	4.0
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0501	ug/L	100	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0504	ug/L	101	(70-130)	30	0.60
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00206	ug/L	103	(50-150)		
MS1_202007290407	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0256	ug/L	102	(70-130)		
MSD1_202007290407	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0258	ug/L	103	(70-130)	30	0.87
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0527	ug/L	105	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0484	ug/L	97	(70-130)	30	8.5
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00207	ug/L	104	(50-150)		
MS1_202007290407	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0244	ug/L	98	(70-130)		
MSD1_202007290407	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0254	ug/L	102	(70-130)	30	3.8

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 08/04/2020

Quant Report - Page 1 of 1

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Pos Tubes (Tot, E., Coli), MPN/100ml (Tot, E., Coli), Pres/Abs (P/A)\* (Tot, E., Coli)

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required:
Comment:
Approved by:

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 08/04/2020

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Total Coliform Large, E. Coli Small, E. Coli Large), MPN/100 mL (Total Coliform, E. Coli), Presence/Absence (P/A)\* (Total Coliform, E. Coli)

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 08/04/2020

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 884399  
Project: 0250000  
Group: WRD Pilot [Set #1]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

### STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>-2</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			



### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 884399  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **July 30, 2020 at 1430**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202007300278</u>	GAC-1M-20200730	07/30/2020 1003
	@537.1	
<u>202007300279</u>	GAC-2M-20200730	07/30/2020 1006
	@537.1	
<u>202007300280</u>	GAC-3M-20200730	07/30/2020 1009
	@537.1	
<u>202007300281</u>	GAC-4M-20200730	07/30/2020 1012
	@537.1	
<u>202007300282</u>	IX-1M-20200730	07/30/2020 1015
	@537.1	
<u>202007300283</u>	IX-2M-20200730	07/30/2020 1018
	@537.1	
<u>202007300284</u>	IX-3M-20200730	07/30/2020 1021
	@537.1	
<u>202007300285</u>	IX-4M-20200730	07/30/2020 1024
	@537.1	
<u>202007300286</u>	LH-INF-20200730	07/30/2020 1027
	@537.1	
	@VOASDWA	
	Calcium Total ICAP	
	Hexavalent chromium(Dissolved)	
	Manganese Total ICAP/MS	
	Potassium Total ICAP	
	Total Dissolved Solid (TDS)	
	Total Suspended Solids (TSS)	
	@ANIONS48	
	Alkalinity in CaCO3 units	
	Chloride	
	Iron Total ICAP	
	Oil and Grease by 1664(subbed)	
	Sodium Total ICAP	
	Total Hardness as CaCO3 by ICP	
	Uranium by ICPMS as pCi/L	
	@QUANT2000 18HR	
	Arsenic Total ICAP/MS	
	Heterotrophic Plate Count	
	Magnesium Total ICAP	
	Perchlorate	
	Sulfate	
	Total Organic Carbon	
	Uranium ICAP/MS	
<u>202007300287</u>	LH-INF-DUP-20200730	07/30/2020 1030
	@537.1	
<u>202007300288</u>	GAC-5M-20200730	07/30/2020 1203

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 884399  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **July 30, 2020 at 1430**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
<u>202007300289</u>	GAC-6M-20200730	07/30/2020 1206
	@537.1	
<u>202007300290</u>	GAC-7M-20200730	07/30/2020 1209
	@537.1	
<u>202007300291</u>	GAC-8M-20200730	07/30/2020 1212
	@537.1	
<u>202007300292</u>	IX-5M-20200730	07/30/2020 1215
	@537.1	
<u>202007300293</u>	IX-6M-20200730	07/30/2020 1218
	@537.1	
<u>202007300294</u>	IX-7M-20200730	07/30/2020 1221
	@537.1	
<u>202007300295</u>	IX-8M-20200730	07/30/2020 1224
	@537.1	
<u>202007300296</u>	MB-INF-20200730	07/30/2020 1227
	@537.1	
	@ANIONS48	@QUANT2000 18HR
	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS
	Chloride	Heterotrophic Plate Count
	Iron Total ICAP	Magnesium Total ICAP
	Oil and Grease by 1664(subbed)	Perchlorate
	Sodium Total ICAP	Sulfate
	Total Hardness as CaCO3 by ICP	Total Organic Carbon
	Uranium by ICPMS as pCi/L	Uranium ICAP/MS
<u>202007300297</u>	FB-20200730	07/30/2020 1230
	@537.1 FB	
<u>202007300298</u>	LH-EFF-20200730	07/30/2020 1033
	@QUANT2000 18HR	Heterotrophic Plate Count
<u>202007300299</u>	MB-EFF-20200730	07/30/2020 1233

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 884399  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **July 30, 2020 at 1430**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@QUANT2000 18HR	Heterotrophic Plate Count

#### Test Description

- @537.1 -- EPA Method 537.1
- @537.1 FB -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0
- @QUANT2000 18HR -- Quantitray Coliforms 18 Hour
- @VOASDWA -- Volatile Organics by GCMS

*8051  
Mmmmmmmmmmm  
7/30/20*

*801394*

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302	
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang	
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) <i>RDT</i>	
LABORATORY: Eurofins Eaton Analytical		TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> 72 HR <input type="checkbox"/> STANDARD		REQUESTED ANALYSES Please check box or fill in blank as needed.	
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results		NO. OF CONT.		Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	
LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	PFAS - full list (EPA 537.1)
	GAC-1M - 20200730	7-30	1003	Water	Alkalinity (as CaCO3), (SM 2320B)
	GAC-2M - 20200730		1006	Water	Uranium, Arsenic, Manganese (EPA 200.8)
	GAC-3M - 20200730		1009	Water	Perchlorate (EPA 314.0)
	GAC-4M - 20200730		1012	Water	Hexavalent Chromium (EPA 218.6)
	IX-1M - 20200730		1015	Water	Fe, Na, K, Ca, Mg (EPA 200.7)
	IX-2M - 20200730		1018	Water	Total Hardness as CaCO3 (SM 2340B)
	IX-3M - 20200730		1021	Water	VOCs (EPA 524.2)
	IX-4M - 20200730		1024	Water	TOC (SM 5310C)
	LH-INF - 20200730		1027	Water	TDS (E160.1/SM 2540C)
	LH-INF-DUP - 20200730		1030	Water	Oil & Grease (EPA 1664)
	GAC-5M - 20200730		1203	Water	TSS (SM 2540D)
	GAC-6M - 20200730		1206	Water	Total Coliform in MPN/100mL (SM 9223B)
	GAC-7M - 20200730		1209	Water	Heterotrophic Plate Count (SM 9215B)
	GAC-8M - 20200730		1212	Water	E Coli in MPN/100mL (SM 9215B)
					Field Filtered
					Preserved
					Unpreserved
Relinquished by: (Signature) <i>Rd Torres</i>		Received by: (Signature)		Date: <u>7-30-2020</u> Time: <u>1430</u>	
Relinquished by: (Signature)		Received by: (Signature)		Date: _____ Time: _____	
Relinquished by: (Signature)		Received by: (Signature)		Date: _____ Time: _____	

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302																					
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang																					
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) <u>RDT</u>																					
LABORATORY: Eurofins Eaton Analytical		<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.																							
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 72 HR <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> STANDARD		Field Filtered Preserved Unpreserved																							
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rtorres@gsi-net.com; Provide EDD of sample results		Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) Alkalinity (as CaCO3), (SM 2320B) Uranium, Arsenic, Manganese (EPA 200.8) Perchlorate (EPA 314.0) Hexavalent Chromium (EPA 218.6) Fe, Na, K, Ca, Mg (EPA 200.7) Total Hardness as CaCO3 (SM 2340B) VOCs (EPA 524.2) TOC (SM 5310C) TDS (E160.1/SM 2540C) TSS (SM 2540D) Oil & Grease (EPA 1664)																							
LAB USE ONLY	SAMPLE ID	DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Field Filtered	Preserved	Unpreserved	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)	Hold	Time:		
	IX-5M-20200730	7-30	12:15	Water	2		2		X															1430	
	IX-6M-20200730		12:18	Water	2		2		X																
	IX-7M-20200730		12:21	Water	2		2		X																
	IX-8M-20200730		12:24	Water	2		2		X																
	MB-INF-20200730		12:27	Water	15		15		X																
	MB-INF-DUP <sup>25</sup>			Water																					
	FB-20200730	7-30	12:30	Water	1		1																		
	LH-EFF-20200730	7-30	10:33	Water	1		1																		
	MB-EFF-20200730	7-30	12:33	Water	1		1																		
Relinquished by: (Signature) <u>[Signature]</u>		Received by: (Signature) <u>[Signature]</u>		Date: <u>7-30-2020</u>		Time: <u>1430</u>																			
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:																			
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:																			

1505  
 07/30/20  
 2020

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

*SOPM*

**SAMPLE TEMP RECEIVED:**

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = *63019* (Observation = *11.9* °C) (Corr. Factor = *0.2* °C) (Final = *11.7* °C)

TYPE OF ICE: Real  Synthetic  No Ice  CONDITION OF ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

**Compliance Acceptance Criteria:**

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results \_\_\_\_\_

7) VOA Headspace:  No Samples with Headspace:  Samples with Headspace (see below):   
 Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251.552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: <i>[Signature]</i>	PRINT NAME: <i>FIREL MacC2</i>	COMPANY/TITLE: <i>Eurofins Eaton Analytical</i>	DATE: <i>7.30.20</i>	TIME: <i>1530</i>
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Tel: (626) 386-1100  
Fax: (626) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Report:** 884399  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

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**Flags Legend:**

LK - The associated blank spike recovery was above method acceptance limits. This target analyte was not detected in the sample.

LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.

R2 - RPD/RSD exceeded the laboratory acceptance limit. See case narrative.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202007300282 IX-1M-20200730</b>						
08/03/2020 23:53	Perfluorooctanoic acid (PFOA)		0.0044		ug/L	0.0020
<b>202007300283 IX-2M-20200730</b>						
08/04/2020 00:03	Perfluorohexanoic acid (PFHxA)		0.0024		ug/L	0.0020
08/04/2020 00:03	Perfluorooctanoic acid (PFOA)		0.0026		ug/L	0.0020
<b>202007300284 IX-3M-20200730</b>						
08/04/2020 00:13	Perfluorohexanoic acid (PFHxA)		0.0024		ug/L	0.0020
08/04/2020 00:13	Perfluorooctanoic acid (PFOA)		0.0038		ug/L	0.0020
<b>202007300285 IX-4M-20200730</b>						
08/04/2020 00:22	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
08/04/2020 00:22	Perfluorooctanoic acid (PFOA)		0.0023		ug/L	0.0020
<b>202007300286 LH-INF-20200730</b>						
07/31/2020 21:17	Alkalinity in CaCO3 units		200		mg/L	2.0
08/05/2020 18:06	Arsenic Total ICAP/MS		3.3	10	ug/L	1.0
07/31/2020 13:40	Calcium Total ICAP		110		mg/L	1.0
07/30/2020 20:43	Chloride		110	250	mg/L	2.5
08/05/2020 19:48	Chloroform (Trichloromethane)		0.54		ug/L	0.50
08/01/2020 17:20	Heterotrophic Plate Count		4100		CFU/ml	1.0
08/10/2020 15:04	Hexavalent chromium(Dissolved)		0.67		ug/L	0.020
07/31/2020 13:40	Magnesium Total ICAP		21		mg/L	0.10
07/30/2020 20:43	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
07/30/2020 20:43	Nitrate as NO3 (calc)		12	45	mg/L	2.2
08/05/2020 14:53	Oil and Grease by 1664(subbed)		2.38		mg/L	0.95
08/04/2020 00:32	Perfluorobutanesulfonic acid (PFBS)		0.0059		ug/L	0.0020
08/04/2020 00:32	Perfluorohexanesulfonic acid (PFHxS)		0.0061		ug/L	0.0020
08/04/2020 00:32	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
08/04/2020 00:32	Perfluorononanoic acid (PFNA)		0.0031		ug/L	0.0020
08/04/2020 00:32	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
08/04/2020 00:32	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
07/31/2020 13:40	Potassium Total ICAP		4.7		mg/L	1.0
07/31/2020 13:40	Sodium Total ICAP		71		mg/L	1.0
07/30/2020 20:43	Sulfate		180	250	mg/L	2.5
08/05/2020 23:11	Total Dissolved Solids (TDS)		650	500	mg/L	10
07/31/2020 15:58	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
07/30/2020 20:43	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10

**SUMMARY OF POSITIVE DATA ONLY**



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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
08/05/2020 21:16	Total Organic Carbon		0.64		mg/L	0.30
08/05/2020 19:48	Total THM		0.54	80	ug/L	0.50
08/04/2020 14:53	Uranium by ICPMS as pCi/L		3.8		pCi/L	0.70
07/31/2020 23:36	Uranium ICAP/MS		5.6	30	ug/L	1.0
<b>202007300287      <u>LH-INF-DUP-20200730</u></b>						
08/03/2020 21:20	Perfluorobutanesulfonic acid (PFBS)		0.0058		ug/L	0.0020
08/03/2020 21:20	Perfluorohexanesulfonic acid (PFHxS)		0.0059		ug/L	0.0020
08/03/2020 21:20	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
08/03/2020 21:20	Perfluorononanoic acid (PFNA)		0.0032		ug/L	0.0020
08/03/2020 21:20	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
08/03/2020 21:20	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
<b>202007300288      <u>GAC-5M-20200730</u></b>						
08/04/2020 00:41	Perfluorobutanesulfonic acid (PFBS)		0.0035		ug/L	0.0020
08/04/2020 00:41	Perfluorohexanoic acid (PFHxA)		0.0026		ug/L	0.0020
08/04/2020 00:41	Perfluorooctanesulfonic acid (PFOS)		0.0027		ug/L	0.0020
08/04/2020 00:41	Perfluorooctanoic acid (PFOA)		0.0035		ug/L	0.0020
<b>202007300289      <u>GAC-6M-20200730</u></b>						
08/03/2020 21:39	Perfluorobutanesulfonic acid (PFBS)		0.0065		ug/L	0.0020
08/03/2020 21:39	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
<b>202007300290      <u>GAC-7M-20200730</u></b>						
08/04/2020 00:51	Perfluorobutanesulfonic acid (PFBS)		0.0052		ug/L	0.0020
08/04/2020 00:51	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
08/04/2020 00:51	Perfluorooctanoic acid (PFOA)		0.0022		ug/L	0.0020
<b>202007300291      <u>GAC-8M-20200730</u></b>						
08/04/2020 15:58	Perfluorobutanesulfonic acid (PFBS)		0.0028		ug/L	0.0020
08/04/2020 15:58	Perfluorooctanesulfonic acid (PFOS)		0.0024		ug/L	0.0020
08/04/2020 15:58	Perfluorooctanoic acid (PFOA)		0.0024		ug/L	0.0020
<b>202007300292      <u>IX-5M-20200730</u></b>						
08/04/2020 16:08	Perfluorohexanoic acid (PFHxA)		0.0026		ug/L	0.0020
08/04/2020 16:08	Perfluorooctanoic acid (PFOA)		0.0042		ug/L	0.0020
<b>202007300293      <u>IX-6M-20200730</u></b>						
08/04/2020 16:17	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
08/04/2020 16:17	Perfluorooctanoic acid (PFOA)		0.0050		ug/L	0.0020
<b>202007300294      <u>IX-7M-20200730</u></b>						

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
08/04/2020 16:36	Perfluoroheptanoic acid (PFHpA)		0.0027		ug/L	0.0020
08/04/2020 16:36	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
08/04/2020 16:36	Perfluorooctanoic acid (PFOA)		0.0068		ug/L	0.0020
		<b>202007300295</b>	<b><u>IX-8M-20200730</u></b>			
08/04/2020 16:46	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
08/04/2020 16:46	Perfluorooctanoic acid (PFOA)		0.0042		ug/L	0.0020
		<b>202007300296</b>	<b><u>MB-INF-20200730</u></b>			
07/31/2020 20:50	Alkalinity in CaCO3 units		170		mg/L	2.0
08/05/2020 18:08	Arsenic Total ICAP/MS		1.6	10	ug/L	1.0
07/31/2020 13:41	Calcium Total ICAP		65		mg/L	1.0
07/30/2020 20:56	Chloride		52	250	mg/L	2.5
08/01/2020 17:20	Heterotrophic Plate Count		790		CFU/ml	1.0
08/10/2020 15:34	Hexavalent chromium(Dissolved)		0.41		ug/L	0.020
07/31/2020 13:41	Magnesium Total ICAP		13		mg/L	0.10
07/30/2020 20:56	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
07/30/2020 20:56	Nitrate as NO3 (calc)		10	45	mg/L	2.2
08/05/2020 14:53	Oil and Grease by 1664(subbed)		2.38		mg/L	0.95
08/04/2020 16:55	Perfluorobutanesulfonic acid (PFBS)		0.0084		ug/L	0.0020
08/04/2020 16:55	Perfluoroheptanoic acid (PFHpA)		0.0033		ug/L	0.0020
08/04/2020 16:55	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
08/04/2020 16:55	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
08/04/2020 16:55	Perfluorononanoic acid (PFNA)		0.0037		ug/L	0.0020
08/04/2020 16:55	Perfluorooctanesulfonic acid (PFOS)		0.035		ug/L	0.0020
08/04/2020 16:55	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
07/31/2020 13:41	Potassium Total ICAP		4.0		mg/L	1.0
07/31/2020 13:41	Sodium Total ICAP		54		mg/L	1.0
07/30/2020 20:56	Sulfate		79	250	mg/L	2.5
08/05/2020 23:12	Total Dissolved Solids (TDS)		390	500	mg/L	10
07/31/2020 15:58	Total Hardness as CaCO3 by ICP (calc)		220		mg/L	3.0
07/30/2020 20:56	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
08/05/2020 21:33	Total Organic Carbon		0.77		mg/L	0.30
08/04/2020 14:53	Uranium by ICPMS as pCi/L		1.6		pCi/L	0.70
07/31/2020 23:39	Uranium ICAP/MS		2.5	30	ug/L	1.0
		<b>202007300298</b>	<b><u>LH-EFF-20200730</u></b>			
08/01/2020 17:20	Heterotrophic Plate Count		3700		CFU/ml	1.0
		<b>202007300299</b>	<b><u>MB-EFF-20200730</u></b>			

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
Fax: (626) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Report:** 884399  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

**Water Replenishment District**  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

Samples Received on:  
07/30/2020 1430

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
08/01/2020 17:20	Heterotrophic Plate Count		910		CFU/ml	1.0

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1M-20200730 (202007300278)</b>					<b>Sampled on 07/30/2020 1003</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	13C2-PFDA	81	%		1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	13C2-PFHxA	90	%		1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	80	%		1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	102	%		1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	92	%		1

<b>GAC-2M-20200730 (202007300279)</b>					<b>Sampled on 07/30/2020 1006</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	13C2-PFDA	84	%		1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	13C2-PFHxA	94	%		1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	84	%		1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	101	%		1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	94	%		1

**GAC-3M-20200730 (202007300280)**

Sampled on 07/30/2020 1009

**EPA 537.1 - EPA Method 537.1**

07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	13C2-PFDA	85	%		1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	13C2-PFHxA	95	%		1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	84	%		1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	103	%		1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**GAC-4M-20200730 (202007300281)**

Sampled on 07/30/2020 1012

**EPA 537.1 - EPA Method 537.1**

07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	13C2-PFDA	86	%		1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	13C2-PFHxA	96	%		1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	86	%		1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	102	%		1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	92	%		1

**IX-1M-20200730 (202007300282)**

Sampled on 07/30/2020 1015

**EPA 537.1 - EPA Method 537.1**

07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0044	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	13C2-PFDA	88	%		1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	13C2-PFHxA	92	%		1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	83	%		1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	106	%		1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	96	%		1

**IX-2M-20200730 (202007300283)**

**Sampled on 07/30/2020 1018**

**EPA 537.1 - EPA Method 537.1**

07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0026	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	13C2-PFDA	89	%		1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	13C2-PFHxA	90	%		1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	82	%		1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	105	%		1

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 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	92	%		1
					<b>Sampled on 07/30/2020 1021</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0038	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	13C2-PFDA	88	%		1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	13C2-PFHxA	93	%		1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	118	%		1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	83	%		1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	102	%		1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**IX-4M-20200730 (202007300285)**

**Sampled on 07/30/2020 1024**

**EPA 537.1 - EPA Method 537.1**

07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0023	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	13C2-PFDA	84	%		1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	13C2-PFHxA	87	%		1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	79	%		1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	103	%		1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**LH-INF-20200730 (202007300286)**

**Sampled on 07/30/2020 1027**

**EPA 200.8 - ICPMS Metals**

07/31/20	08/05/20 18:06	1265201	1266161	(EPA 200.8)	Arsenic Total ICAP/MS	3.3	ug/L	1.0	1
07/31/20	07/31/20 23:36	1265201	1265433	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
07/31/20	07/31/20 23:36	1265201	1265433	(EPA 200.8)	Uranium ICAP/MS	5.6	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

07/31/20	07/31/20 13:40	1265201	1265297	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
07/31/20	07/31/20 13:40	1265201	1265297	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
07/31/20	07/31/20 13:40	1265201	1265297	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
07/31/20	07/31/20 13:40	1265201	1265297	(EPA 200.7)	Potassium Total ICAP	4.7	mg/L	1.0	1
07/31/20	07/31/20 13:40	1265201	1265297	(EPA 200.7)	Sodium Total ICAP	71	mg/L	1.0	1

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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>SM 9215B - Heterotrophic Plate Count</b>									
07/30/20	08/01/20 17:20	1265277	1265484	(SM 9215B)	Heterotrophic Plate Count	4100	CFU/ml	1.0	1
<b>SM 9223B - Quantitray Coliforms 18 Hour</b>									
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria	<1	MPN/100 mL	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria	<1	MPN/100 mL	1.0	1
<b>SM 5310C - Total Organic Carbon</b>									
08/05/20 21:16			1266174	(SM 5310C)	Total Organic Carbon	0.64	mg/L	0.30	1
<b>EPA 200.8 - Uranium by ICPMS as pCi/L</b>									
08/04/20 14:53				(EPA 200.8)	Uranium by ICPMS as pCi/L	3.8 (c)	pCi/L	0.70	1
<b>SM 2340B - Total Hardness as CaCO3 by ICP</b>									
07/31/20 15:58				(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
<b>EPA 218.6 - Hexavalent chromium(Dissolved)</b>									
08/10/20 15:04			1267424	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.67	ug/L	0.020	1
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>									
07/30/20 20:43			1264850	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
07/30/20 20:43			1264850	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
07/30/20 20:43			1264850	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
07/30/20 20:43			1264850	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
07/30/20 20:43			1265140	(EPA 300.0)	Chloride	110	mg/L	2.5	5
07/30/20 20:43			1265140	(EPA 300.0)	Sulfate	180	mg/L	2.5	5
<b>EPA 314.0 - Perchlorate</b>									
08/05/20 15:21		(1)	1266293	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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**Water Replenishment District**  
 Joseph Liles  
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 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0059	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0061	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0031	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	13C2-PFDA	87	%		1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	13C2-PFHxA	88	%		1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	81	%		1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	105	%		1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	92	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	08/05/20 14:53			(EPA 1664)	Oil and Grease by 1664(subbed)	2.38	mg/L	0.95	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (LK,R2,LM)	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1

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 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	2,2-Dichloropropane	ND (LK)	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Chloroform (Trichloromethane)	0.54	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Naphthalene	ND (LK,R2,LM)	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1

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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	tert-amyl Methyl Ether	ND (LK)	ug/L	3.0	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Total THM	0.54	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,2-Dichloroethane-d4	99	%		1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	4-Bromofluorobenzene	99	%		1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Toluene-d8	98	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	07/31/20 21:17		1265366	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
08/05/20	08/05/20 23:11	1266285	1266286	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	650	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	08/04/20 22:21		1265927	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<b><u>LH-INF-DUP-20200730 (202007300287)</u></b>									
<b>EPA 537.1 - EPA Method 537.1</b>									
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Sampled on 07/30/2020 1030

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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0058	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0059	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0032	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	13C2-PFDA	88	%		1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	13C2-PFHxA	87	%		1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	78	%		1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	108	%		1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**GAC-5M-20200730 (202007300288)**

Sampled on 07/30/2020 1203

**EPA 537.1 - EPA Method 537.1**

07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0035	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

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Report: 884399  
 Project: 0250000  
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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0026	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0027	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0035	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	13C2-PFDA	85	%		1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	13C2-PFHxA	83	%		1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	71	%		1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	104	%		1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**GAC-6M-20200730 (202007300289)**

Sampled on 07/30/2020 1206

**EPA 537.1 - EPA Method 537.1**

07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0065	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	13C2-PFDA	86	%		1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	13C2-PFHxA	92	%		1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	82	%		1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	106	%		1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	92	%		1

**GAC-7M-20200730 (202007300290)**

Sampled on 07/30/2020 1209

**EPA 537.1 - EPA Method 537.1**

07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0052	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0022	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	13C2-PFDA	85	%		1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	13C2-PFHxA	94	%		1

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 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	85	%		1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	104	%		1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**GAC-8M-20200730 (202007300291)**

**Sampled on 07/30/2020 1212**

**EPA 537.1 - EPA Method 537.1**

08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0028	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0024	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0024	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	13C2-PFDA	89	%		1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	13C2-PFHxA	94	%		1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	13C3-HFPO-DA	85	%		1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	13C4-PFOS- IS#2	112	%		1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**IX-5M-20200730 (202007300292)**

**Sampled on 07/30/2020 1215**

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 537.1 - EPA Method 537.1</b>									
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	11-chloro-eicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0026	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0042	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	13C2-PFDA	98	%		1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	13C2-PFHxA	90	%		1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	13C2-PFOA- IS#1	124	%		1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	13C3-HFPO-DA	86	%		1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	13C4-PFOS- IS#2	112	%		1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	d3-NMeFOSAA	114	%		1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**IX-6M-20200730 (202007300293)**

Sampled on 07/30/2020 1218

<b>EPA 537.1 - EPA Method 537.1</b>									
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	11-chloro-eicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0050	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	13C2-PFDA	97	%		1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	13C2-PFHxA	94	%		1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	13C3-HFPO-DA	86	%		1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	13C4-PFOS- IS#2	114	%		1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	d3-NMeFOSAA	112	%		1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**IX-7M-20200730 (202007300294)**

Sampled on 07/30/2020 1221

**EPA 537.1 - EPA Method 537.1**

08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

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 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0027	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0068	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	13C2-PFDA	98	%		1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	13C2-PFHxA	89	%		1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	13C3-HFPO-DA	84	%		1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	d3-NMeFOSAA	110	%		1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	d5-NEtFOSAA	101	%		1

**IX-8M-20200730 (202007300295)**

**Sampled on 07/30/2020 1224**

**EPA 537.1 - EPA Method 537.1**

08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0042	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	13C2-PFDA	94	%		1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	13C2-PFHxA	90	%		1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	13C2-PFOA- IS#1	125	%		1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	13C3-HFPO-DA	84	%		1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	d3-NMeFOSAA	109	%		1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	d5-NEtFOSAA	101	%		1

**MB-INF-20200730 (202007300296)**

Sampled on 07/30/2020 1227

**EPA 200.8 - ICPMS Metals**

07/31/20	08/05/20 18:08	1265201	1266161	(EPA 200.8)	Arsenic Total ICAP/MS	1.6	ug/L	1.0	1
07/31/20	07/31/20 23:39	1265201	1265433	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
07/31/20	07/31/20 23:39	1265201	1265433	(EPA 200.8)	Uranium ICAP/MS	2.5	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

07/31/20	07/31/20 13:41	1265201	1265297	(EPA 200.7)	Calcium Total ICAP	65	mg/L	1.0	1
07/31/20	07/31/20 13:41	1265201	1265297	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
07/31/20	07/31/20 13:41	1265201	1265297	(EPA 200.7)	Magnesium Total ICAP	13	mg/L	0.10	1
07/31/20	07/31/20 13:41	1265201	1265297	(EPA 200.7)	Potassium Total ICAP	4.0	mg/L	1.0	1
07/31/20	07/31/20 13:41	1265201	1265297	(EPA 200.7)	Sodium Total ICAP	54	mg/L	1.0	1

**SM 9215B - Heterotrophic Plate Count**

07/30/20	08/01/20 17:20	1265277	1265484	(SM 9215B)	Heterotrophic Plate Count	790	CFU/ml	1.0	1
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**SM 9223B - Quantitray Coliforms 18 Hour**

07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria	<1	MPN/100 mL	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria	<1	MPN/100 mL	1.0	1

**SM 5310C - Total Organic Carbon**

	08/05/20 21:33		1266174	(SM 5310C)	Total Organic Carbon	0.77	mg/L	0.30	1
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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 200.8 - Uranium by ICPMS as pCi/L</b>									
	08/04/20 14:53			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.6 (c)	pCi/L	0.70	1
<b>SM 2340B - Total Hardness as CaCO3 by ICP</b>									
	07/31/20 15:58			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	220 (c)	mg/L	3.0	1
<b>EPA 218.6 - Hexavalent chromium(Dissolved)</b>									
	08/10/20 15:34		1267424	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.41	ug/L	0.020	1
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>									
	07/30/20 20:56		1264850	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
	07/30/20 20:56		1264850	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5
	07/30/20 20:56		1264850	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	07/30/20 20:56		1264850	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	07/30/20 20:56		1265140	(EPA 300.0)	Chloride	52	mg/L	2.5	5
	07/30/20 20:56		1265140	(EPA 300.0)	Sulfate	79	mg/L	2.5	5
<b>EPA 314.0 - Perchlorate</b>									
	08/05/20 15:46	(1)	1266293	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0084	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0037	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.035	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1

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 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	13C2-PFDA	96	%		1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	13C2-PFHxA	88	%		1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	13C2-PFOA- IS#1	129	%		1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	13C3-HFPO-DA	81	%		1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	13C4-PFOS- IS#2	115	%		1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	d3-NMeFOSAA	117	%		1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	d5-NEtFOSAA	98	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	08/05/20 14:53			(EPA 1664)	Oil and Grease by 1664(subbed)	2.38	mg/L	0.95	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (LK,R2,LM)	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	2,2-Dichloropropane	ND (LK)	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1

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Samples Received on:  
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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Naphthalene	ND (LK,R2,LM)	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	tert-amyl Methyl Ether	ND (LK)	ug/L	3.0	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1

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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,2-Dichloroethane-d4	102	%		1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	4-Bromofluorobenzene	96	%		1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Toluene-d8	98	%		1

**SM 2320B - Alkalinity in CaCO3 units**

07/31/20	20:50		1265366	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
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**E160.1/SM2540C - Total Dissolved Solids (TDS)**

08/05/20	08/05/20 23:12	1266285	1266286	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	390	mg/L	10	1
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**SM 2540D - Total Suspended Solids (TSS)**

08/04/20	22:22		1265927	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
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**FB-20200730 (202007300297)**

Sampled on 07/30/2020 1230

**EPA 537.1 - EPA Method 537.1**

08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	13C2-PFDA	100	%		1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	13C2-PFHxA	105	%		1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	13C3-HFPO-DA	100	%		1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**LH-EFF-20200730 (202007300298)**

**Sampled on 07/30/2020 1033**

**SM 9215B - Heterotrophic Plate Count**

07/30/20	08/01/20 17:20	1265277	1265484	(SM 9215B)	Heterotrophic Plate Count	3700	CFU/ml	1.0	1
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**SM 9223B - Quantitray Coliforms 18 Hour**

07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria	<1	MPN/100 mL	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria	<1	MPN/100 mL	1.0	1

**MB-EFF-20200730 (202007300299)**

**Sampled on 07/30/2020 1233**

**SM 9215B - Heterotrophic Plate Count**

07/30/20	08/01/20 17:20	1265277	1265484	(SM 9215B)	Heterotrophic Plate Count	910	CFU/ml	1.0	1
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**SM 9223B - Quantitray Coliforms 18 Hour**

07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria	<1	MPN/100 mL	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria	<1	MPN/100 mL	1.0	1

Rounding on totals after summation.

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**Report:** 884399  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1264850**

202007300286 LH-INF-20200730  
 202007300296 MB-INF-20200730

**Analysis Date: 07/30/2020**

Analyzed by: B9PD  
 Analyzed by: B9PD

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1265140**

202007300286 LH-INF-20200730  
 202007300296 MB-INF-20200730

**Analysis Date: 07/30/2020**

Analyzed by: B9PD  
 Analyzed by: B9PD

**Quantitray Coliforms 18 Hour**

**Prep Batch: 1265155 Analytical Batch: 1265278**

202007300286 LH-INF-20200730  
 202007300296 MB-INF-20200730  
 202007300298 LH-EFF-20200730  
 202007300299 MB-EFF-20200730

**Analysis Date: 07/31/2020**

Analyzed by: XBL3  
 Analyzed by: XBL3  
 Analyzed by: XBL3  
 Analyzed by: XBL3

**ICP Metals**

**Prep Batch: 1265201 Analytical Batch: 1265297**

202007300286 LH-INF-20200730  
 202007300296 MB-INF-20200730

**Analysis Date: 07/31/2020**

Analyzed by: Y7TT  
 Analyzed by: Y7TT

**Alkalinity in CaCO3 units**

**Analytical Batch: 1265366**

202007300286 LH-INF-20200730  
 202007300296 MB-INF-20200730

**Analysis Date: 07/31/2020**

Analyzed by: ZB2Z  
 Analyzed by: ZB2Z

**ICPMS Metals**

**Prep Batch: 1265201 Analytical Batch: 1265433**

202007300286 LH-INF-20200730  
 202007300296 MB-INF-20200730

**Analysis Date: 07/31/2020**

Analyzed by: AZS  
 Analyzed by: AZS

**Heterotrophic Plate Count**

**Prep Batch: 1265277 Analytical Batch: 1265484**

202007300286 LH-INF-20200730  
 202007300296 MB-INF-20200730  
 202007300298 LH-EFF-20200730  
 202007300299 MB-EFF-20200730

**Analysis Date: 08/01/2020**

Analyzed by: HUQ2  
 Analyzed by: HUQ2  
 Analyzed by: HUQ2  
 Analyzed by: HUQ2

**EPA Method 537.1**

**Prep Batch: 1265209 Analytical Batch: 1265756**

202007300278 GAC-1M-20200730  
 202007300279 GAC-2M-20200730  
 202007300280 GAC-3M-20200730  
 202007300281 GAC-4M-20200730  
 202007300282 IX-1M-20200730  
 202007300283 IX-2M-20200730  
 202007300284 IX-3M-20200730  
 202007300285 IX-4M-20200730

**Analysis Date: 08/03/2020**

Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM

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**Report:** 884399  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District

202007300286	LH-INF-20200730	Analyzed by: Y7BM
202007300287	LH-INF-DUP-20200730	Analyzed by: Y7BM
202007300288	GAC-5M-20200730	Analyzed by: Y7BM
202007300289	GAC-6M-20200730	Analyzed by: Y7BM
202007300290	GAC-7M-20200730	Analyzed by: Y7BM

**Total Suspended Solids (TSS)**

**Analytical Batch: 1265927**

**Analysis Date: 08/04/2020**

202007300286	LH-INF-20200730	Analyzed by: TJ52
202007300296	MB-INF-20200730	Analyzed by: TJ52

**EPA Method 537.1**

**Prep Batch: 1265602 Analytical Batch: 1265992**

**Analysis Date: 08/04/2020**

202007300291	GAC-8M-20200730	Analyzed by: SZZ
202007300292	IX-5M-20200730	Analyzed by: SZZ
202007300293	IX-6M-20200730	Analyzed by: SZZ
202007300294	IX-7M-20200730	Analyzed by: SZZ
202007300295	IX-8M-20200730	Analyzed by: SZZ
202007300296	MB-INF-20200730	Analyzed by: SZZ

**ICPMS Metals**

**Prep Batch: 1265201 Analytical Batch: 1266161**

**Analysis Date: 08/05/2020**

202007300286	LH-INF-20200730	Analyzed by: DHX7
202007300296	MB-INF-20200730	Analyzed by: DHX7

**Total Organic Carbon**

**Analytical Batch: 1266174**

**Analysis Date: 08/05/2020**

202007300286	LH-INF-20200730	Analyzed by: ZB2Z
202007300296	MB-INF-20200730	Analyzed by: ZB2Z

**Total Dissolved Solids (TDS)**

**Prep Batch: 1266285 Analytical Batch: 1266286**

**Analysis Date: 08/05/2020**

202007300286	LH-INF-20200730	Analyzed by: JRF
202007300296	MB-INF-20200730	Analyzed by: JRF

**Perchlorate**

**Analytical Batch: 1266293**

**Analysis Date: 08/05/2020**

202007300286	LH-INF-20200730	Analyzed by: H5VG
202007300296	MB-INF-20200730	Analyzed by: H5VG

**Volatile Organics by GCMS**

**Prep Batch: 1266298 Analytical Batch: 1266299**

**Analysis Date: 08/05/2020**

202007300286	LH-INF-20200730	Analyzed by: FX5E
202007300296	MB-INF-20200730	Analyzed by: FX5E

**EPA Method 537.1**

**Prep Batch: 1265933 Analytical Batch: 1266344**

**Analysis Date: 08/05/2020**

202007300297	FB-20200730	Analyzed by: KAM
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**Hexavalent chromium(Dissolved)**

**Analytical Batch: 1267424**

**Analysis Date: 08/10/2020**

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**Report:** 884399  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

## Water Replenishment District

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202007300286  
202007300296

LH-INF-20200730  
MB-INF-20200730

Analyzed by: TLH  
Analyzed by: TLH

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1264850</b>					<b>Analysis Date: 07/30/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	102	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	102	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0506	mg/L	101	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0133	mg/L	106	(50-150)		
MS_202007300296	Nitrate as Nitrogen by IC	2.4	6.5	9.01	mg/L	106	(80-120)		
MSD_202007300296	Nitrate as Nitrogen by IC	2.4	6.5	9.08	mg/L	108	(80-120)	20	0.79
LCS1	Nitrite Nitrogen by IC		1	1.00	mg/L	100	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.01	mg/L	101	(90-110)	20	1
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0468	mg/L	94	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.00810	mg/L	65	(50-150)		
MS_202007300296	Nitrite Nitrogen by IC	ND	2.5	2.53	mg/L	101	(80-120)		
MSD_202007300296	Nitrite Nitrogen by IC	ND	2.5	2.55	mg/L	102	(80-120)	20	0.89
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1265140</b>					<b>Analysis Date: 07/30/2020</b>				
LCS1	Chloride		25	26.6	mg/L	106	(90-110)		
LCS2	Chloride		25	26.6	mg/L	106	(90-110)	20	0.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.510	mg/L	102	(50-150)		
MS_202007300296	Chloride	52	65	124	mg/L	114	(80-120)		
MS_202007300430	Chloride	ND	325	342	mg/L	108	(80-120)		
MSD_202007300296	Chloride	52	65	125	mg/L	116	(80-120)	20	1.0
MSD_202007300430	Chloride	ND	325	344	mg/L	109	(80-120)	20	0.47
LCS1	Sulfate		50	52.4	mg/L	105	(90-110)		
LCS2	Sulfate		50	52.3	mg/L	105	(90-110)	20	0.19
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	1.01	mg/L	101	(50-150)		
MRL_W	Sulfate		0.25	0.240	mg/L	96	(50-150)		
MS_202007300296	Sulfate	79	125	217	mg/L	110	(80-120)		
MS_202007300430	Sulfate	ND	625	691	mg/L	109	(80-120)		
MSD_202007300296	Sulfate	79	125	219	mg/L	111	(80-120)	20	0.94
MSD_202007300430	Sulfate	ND	625	694	mg/L	109	(80-120)	20	0.39

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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>ICP Metals by EPA 200.7</b>									
<b>Analytical Batch: 1265297</b>					<b>Analysis Date: 07/31/2020</b>				
LCS1	Calcium Total ICAP		50	50.5	mg/L	101	(85-115)		
LCS2	Calcium Total ICAP		50	51.0	mg/L	102	(85-115)	20	0.99
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	1.01	mg/L	101	(50-150)		
MS_202007300210	Calcium Total ICAP	100	50	145	mg/L	86	(70-130)		
MS2_202007300016	Calcium Total ICAP	48	50	95.0	mg/L	95	(70-130)		
MSD_202007300210	Calcium Total ICAP	100	50	146	mg/L	87	(70-130)	20	0.73
MSD2_202007300016	Calcium Total ICAP	48	50	95.4	mg/L	95	(70-130)	20	0.39
LCS1	Iron Total ICAP		5	5.06	mg/L	101	(85-115)		
LCS2	Iron Total ICAP		5	5.09	mg/L	102	(85-115)	20	0.59
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0205	mg/L	103	(50-150)		
MS_202007300210	Iron Total ICAP	ND	5	5.10	mg/L	102	(70-130)		
MS2_202007300016	Iron Total ICAP	ND	5	5.07	mg/L	101	(70-130)		
MSD_202007300210	Iron Total ICAP	ND	5	5.12	mg/L	102	(70-130)	20	0.39
MSD2_202007300016	Iron Total ICAP	ND	5	5.10	mg/L	102	(70-130)	20	0.51
LCS1	Magnesium Total ICAP		20	19.8	mg/L	99	(85-115)		
LCS2	Magnesium Total ICAP		20	20.0	mg/L	100	(85-115)	20	0.50
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0951	mg/L	95	(50-150)		
MS_202007300210	Magnesium Total ICAP	28	20	46.5	mg/L	93	(70-130)		
MS2_202007300016	Magnesium Total ICAP	42	20	60.7	mg/L	92	(70-130)		
MSD_202007300210	Magnesium Total ICAP	28	20	46.8	mg/L	94	(70-130)	20	0.59
MSD2_202007300016	Magnesium Total ICAP	42	20	60.9	mg/L	93	(70-130)	20	0.38
LCS1	Potassium Total ICAP		20	20.0	mg/L	100	(85-115)		
LCS2	Potassium Total ICAP		20	20.2	mg/L	101	(85-115)	20	1
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.696	mg/L	70	(50-150)		
MS_202007300210	Potassium Total ICAP	4.2	20	25.7	mg/L	107	(70-130)		
MS2_202007300016	Potassium Total ICAP	2.8	20	24.4	mg/L	108	(70-130)		
MSD_202007300210	Potassium Total ICAP	4.2	20	25.8	mg/L	108	(70-130)	20	0.41
MSD2_202007300016	Potassium Total ICAP	2.8	20	24.6	mg/L	109	(70-130)	20	0.69
LCS1	Sodium Total ICAP		50	50.6	mg/L	101	(85-115)		
LCS2	Sodium Total ICAP		50	51.2	mg/L	102	(85-115)	20	1.2
MBLK	Sodium Total ICAP			<0.5	mg/L				

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Report: 884399  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Sodium Total ICAP		1	1.10	mg/L	110	(50-150)		
MS_202007300210	Sodium Total ICAP	55	50	99.5	mg/L	89	(70-130)		
MS2_202007300016	Sodium Total ICAP	53	50	99.1	mg/L	91	(70-130)		
MSD_202007300210	Sodium Total ICAP	55	50	100	mg/L	91	(70-130)	20	0.50
MSD2_202007300016	Sodium Total ICAP	53	50	99.4	mg/L	92	(70-130)	20	0.28

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1265366

Analysis Date: 07/31/2020

LCS1	Alkalinity in CaCO3 units		100	98.5	mg/L	99	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.4	mg/L	98	(90-110)	20	0.10
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.88	mg/L	94	(50-150)		
MS_202007300052	Alkalinity in CaCO3 units	5.0	100	111	mg/L	106	(80-120)		
MS_202007300151	Alkalinity in CaCO3 units	70	100	170	mg/L	99	(80-120)		
MSD_202007300052	Alkalinity in CaCO3 units	5.0	100	111	mg/L	106	(80-120)	20	0.17
MSD_202007300151	Alkalinity in CaCO3 units	70	100	170	mg/L	100	(80-120)	20	0.27

ICPMS Metals by EPA 200.8

Analytical Batch: 1265433

Analysis Date: 07/31/2020

LCS1	Arsenic Total ICAP/MS		50	48.7	ug/L	97	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	47.1	ug/L	94	(85-115)	20	3.3
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.30	ug/L	130	(50-150)		
MS_202007290620	Arsenic Total ICAP/MS	3.4	50	50.3	ug/L	94	(70-130)		
MS2_202007300417	Arsenic Total ICAP/MS	ND	50	46.9	ug/L	93	(70-130)		
MSD_202007290620	Arsenic Total ICAP/MS	3.4	50	52.2	ug/L	98	(70-130)	20	3.6
MSD2_202007300417	Arsenic Total ICAP/MS	ND	50	52.8	ug/L	105	(70-130)	20	12
LCS1	Manganese Total ICAP/MS		100	100	ug/L	100	(85-115)		
LCS2	Manganese Total ICAP/MS		100	95.3	ug/L	95	(85-115)	20	4.8
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	1.96	ug/L	98	(50-150)		
MS_202007290620	Manganese Total ICAP/MS	ND	100	95.2	ug/L	95	(70-130)		
MS2_202007300417	Manganese Total ICAP/MS	ND	100	93.7	ug/L	93	(70-130)		
MSD_202007290620	Manganese Total ICAP/MS	ND	100	98.8	ug/L	98	(70-130)	20	3.8
MSD2_202007300417	Manganese Total ICAP/MS	ND	100	106	ug/L	106	(70-130)	20	12
LCS1	Uranium ICAP/MS		50	51.2	ug/L	102	(85-115)		
LCS2	Uranium ICAP/MS		50	48.1	ug/L	96	(85-115)	20	6.2
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.966	ug/L	97	(50-150)		

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Report: 884399  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202007290620	Uranium ICAP/MS	ND	50	49.4	ug/L	99	(70-130)		
MS2_202007300417	Uranium ICAP/MS	ND	50	47.8	ug/L	96	(70-130)		
MSD_202007290620	Uranium ICAP/MS	ND	50	51.0	ug/L	102	(70-130)	20	3.4
MSD2_202007300417	Uranium ICAP/MS	ND	50	54.6	ug/L	109	(70-130)	20	13

EPA Method 537.1 by EPA 537.1

Prep Batch: 1265209 Analytical Batch: 1265756

Analysis Date: 08/03/2020

DUP_202007300289	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0437	ug/L	93	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0445	ug/L	94	(70-130)	30	1.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00176	ug/L	93	(50-150)		
MS2_202007300287	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0407	ug/L	86	(70-130)		
DUP_202007300289	13C2-PFDA (S)			85.7	%	86	(70-130)		
LCS3	13C2-PFDA (S)		100	90.0	%	90	(70-130)		
LCS4	13C2-PFDA (S)		100	90.0	%	90	(70-130)		
MBLK	13C2-PFDA (S)			91.3	%	91	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	88.4	%	88	(70-130)		
MS2_202007300287	13C2-PFDA (S)		100	90.3	%	90	(70-130)		
DUP_202007300289	13C2-PFHxA (S)			90.4	%	90	(70-130)		
LCS3	13C2-PFHxA (S)		100	96.5	%	96	(70-130)		
LCS4	13C2-PFHxA (S)		100	94.8	%	95	(70-130)		
MBLK	13C2-PFHxA (S)			100	%	100	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	95.7	%	96	(70-130)		
MS2_202007300287	13C2-PFHxA (S)		100	88.7	%	89	(70-130)		
DUP_202007300289	13C2-PFOA- IS#1 (I)			114	%	115	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	113	%	113	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			114	%	114	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
MS2_202007300287	13C2-PFOA- IS#1 (I)		100	118	%	118	(50-150)		
DUP_202007300289	13C3-HFPO-DA (S)			81.0	%	81	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	87.9	%	88	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	87.0	%	87	(70-130)		
MBLK	13C3-HFPO-DA (S)			90.8	%	91	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	87.4	%	87	(70-130)		
MS2_202007300287	13C3-HFPO-DA (S)		100	80.0	%	80	(70-130)		
DUP_202007300289	13C4-PFOS- IS#2 (I)			103	%	103	(50-150)		

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Report: 884399  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MS2_202007300287	13C4-PFOS- IS#2 (I)		100	106	%	107	(50-150)		
DUP_202007300289	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0451	ug/L	93	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0443	ug/L	91	(70-130)	30	1.8
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00184	ug/L	98	(50-150)		
MS2_202007300287	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0432	ug/L	89	(70-130)		
DUP_202007300289	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0431	ug/L	93	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0436	ug/L	94	(70-130)	30	1.1
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00175	ug/L	94	(50-150)		
MS2_202007300287	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0420	ug/L	90	(70-130)		
DUP_202007300289	d3-NMeFOSAA (I)			101	%	101	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MBLK	d3-NMeFOSAA (I)			102	%	102	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MS2_202007300287	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
DUP_202007300289	d5-NEtFOSAA (S)			92.4	%	92	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	93.4	%	93	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	95.5	%	96	(70-130)		
MBLK	d5-NEtFOSAA (S)			98.6	%	99	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	94.6	%	95	(70-130)		
MS2_202007300287	d5-NEtFOSAA (S)		100	88.4	%	88	(70-130)		
DUP_202007300289	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0447	ug/L	90	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0435	ug/L	87	(70-130)	30	2.7
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00175	ug/L	88	(50-150)		
MS2_202007300287	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0420	ug/L	84	(70-130)		
DUP_202007300289	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0492	ug/L	99	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0499	ug/L	100	(70-130)	30	1.2

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Report: 884399  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00210	ug/L	105	(50-150)		
MS2_202007300287	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0479	ug/L	96	(70-130)		
DUP_202007300289	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0500	ug/L	100	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0508	ug/L	102	(70-130)	30	1.8
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	104	(50-150)		
MS2_202007300287	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0503	ug/L	101	(70-130)		
DUP_202007300289	Perfluorobutanesulfonic acid (PFBS)	0.0065		0.00639	ug/L		(0-30)	30	1.3
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0441	ug/L	100	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0433	ug/L	98	(70-130)	30	1.8
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00181	ug/L	102	(50-150)		
MS2_202007300287	Perfluorobutanesulfonic acid (PFBS)	0.0058	0.044	0.0463	ug/L	92	(70-130)		
DUP_202007300289	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0452	ug/L	91	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0455	ug/L	91	(70-130)	30	0.44
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00182	ug/L	91	(50-150)		
MS2_202007300287	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0473	ug/L	93	(70-130)		
DUP_202007300289	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0434	ug/L	87	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0424	ug/L	85	(70-130)	30	2.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00167	ug/L	83	(50-150)		
MS2_202007300287	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0412	ug/L	82	(70-130)		
DUP_202007300289	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0499	ug/L	100	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0512	ug/L	102	(70-130)	30	2.6
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00223	ug/L	112	(50-150)		
MS2_202007300287	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0522	ug/L	101	(70-130)		
DUP_202007300289	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0467	ug/L	102	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0474	ug/L	104	(70-130)	30	1.5
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00189	ug/L	104	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202007300287	Perfluorohexanesulfonic acid (PFHxS)	0.0059	0.046	0.0514	ug/L	100	(70-130)		
DUP_202007300289	Perfluorohexanoic acid (PFHxA)	0.0036		0.00366	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0520	ug/L	104	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0500	ug/L	100	(70-130)	30	3.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00209	ug/L	104	(50-150)		
MS2_202007300287	Perfluorohexanoic acid (PFHxA)	0.0030	0.05	0.0490	ug/L	92	(70-130)		
DUP_202007300289	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0479	ug/L	96	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0481	ug/L	96	(70-130)	30	0.42
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00198	ug/L	99	(50-150)		
MS2_202007300287	Perfluorononanoic acid (PFNA)	0.0032	0.05	0.0614	ug/L	116	(70-130)		
DUP_202007300289	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0481	ug/L	104	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0486	ug/L	105	(70-130)	30	1.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00202	ug/L	109	(50-150)		
MS2_202007300287	Perfluorooctanesulfonic acid (PFOS)	0.030	0.046	0.0793	ug/L	107	(70-130)		
DUP_202007300289	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0498	ug/L	100	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0506	ug/L	101	(70-130)	30	1.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00224	ug/L	112	(50-150)		
MS2_202007300287	Perfluorooctanoic acid (PFOA)	0.012	0.05	0.0617	ug/L	100	(70-130)		
DUP_202007300289	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0526	ug/L	105	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0533	ug/L	107	(70-130)	30	1.3
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00216	ug/L	108	(50-150)		
MS2_202007300287	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0520	ug/L	104	(70-130)		
DUP_202007300289	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0427	ug/L	86	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0429	ug/L	86	(70-130)	30	0.47
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00172	ug/L	86	(50-150)		
MS2_202007300287	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0415	ug/L	83	(70-130)		
DUP_202007300289	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0464	ug/L	93	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0464	ug/L	93	(70-130)	30	0.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00190	ug/L	95	(50-150)		
MS2_202007300287	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0460	ug/L	92	(70-130)		

**Total Suspended Solids (TSS) by SM 2540D**

Analytical Batch: 1265927

Analysis Date: 08/04/2020

DUP_202006240063	Total Suspended Solids (TSS)	140		126	mg/L		(0-10)	10	9.1
DUP_202006240075	Total Suspended Solids (TSS)	72		78.0	mg/L		(0-10)	10	8.0
LCS1	Total Suspended Solids (TSS)		175	170	mg/L	97	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	172	mg/L	98	(71-107)	20	1.2
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	11.0	mg/L	110	(50-150)		

**EPA Method 537.1 by EPA 537.1**

Prep Batch: 1265602 Analytical Batch: 1265992

Analysis Date: 08/04/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0229	ug/L	97	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0245	ug/L	104	(70-130)	30	6.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00182	ug/L	97	(50-150)		
MS1_202007290444	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0231	ug/L	98	(70-130)		
MSD1_202007290444	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0225	ug/L	96	(70-130)	30	2.8
LCS1	13C2-PFDA (S)		100	95.6	%	96	(70-130)		
LCS2	13C2-PFDA (S)		100	92.2	%	92	(70-130)		
MBLK	13C2-PFDA (S)			98.6	%	99	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	107	%	107	(70-130)		
MS1_202007290444	13C2-PFDA (S)		100	86.3	%	86	(70-130)		
MSD1_202007290444	13C2-PFDA (S)		100	92.3	%	92	(70-130)		
LCS1	13C2-PFHxA (S)		100	98.1	%	98	(70-130)		
LCS2	13C2-PFHxA (S)		100	96.6	%	97	(70-130)		
MBLK	13C2-PFHxA (S)			96.8	%	97	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MS1_202007290444	13C2-PFHxA (S)		100	90.8	%	91	(70-130)		
MSD1_202007290444	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	117	%	117	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			119	%	119	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202007290444	13C2-PFOA- IS#1 (I)		100	118	%	118	(50-150)		
MSD1_202007290444	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	88.9	%	89	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	87.8	%	88	(70-130)		
MBLK	13C3-HFPO-DA (S)			90.4	%	90	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	94.4	%	94	(70-130)		
MS1_202007290444	13C3-HFPO-DA (S)		100	84.3	%	84	(70-130)		
MSD1_202007290444	13C3-HFPO-DA (S)		100	92.0	%	92	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	108	%	108	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			108	%	109	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
MS1_202007290444	13C4-PFOS- IS#2 (I)		100	108	%	108	(50-150)		
MSD1_202007290444	13C4-PFOS- IS#2 (I)		100	110	%	110	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0248	ug/L	105	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0252	ug/L	107	(70-130)	30	1.6
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00205	ug/L	109	(50-150)		
MS1_202007290444	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0242	ug/L	102	(70-130)		
MSD1_202007290444	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0247	ug/L	105	(70-130)	30	2.1
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0243	ug/L	104	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0246	ug/L	106	(70-130)	30	1.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00192	ug/L	103	(50-150)		
MS1_202007290444	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0231	ug/L	99	(70-130)		
MSD1_202007290444	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0226	ug/L	97	(70-130)	30	2.0
LCS1	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
MBLK	d3-NMeFOSAA (I)			113	%	113	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	111	%	111	(50-150)		
MS1_202007290444	d3-NMeFOSAA (I)		100	111	%	111	(50-150)		
MSD1_202007290444	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	94.2	%	94	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	97.7	%	98	(70-130)		
MBLK	d5-NEtFOSAA (S)			93.4	%	93	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	97.1	%	97	(70-130)		
MS1_202007290444	d5-NEtFOSAA (S)		100	88.9	%	89	(70-130)		
MSD1_202007290444	d5-NEtFOSAA (S)		100	94.2	%	94	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 884399  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0230	ug/L	92	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0236	ug/L	94	(70-130)	30	2.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00187	ug/L	93	(50-150)		
MS1_202007290444	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0225	ug/L	90	(70-130)		
MSD1_202007290444	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0236	ug/L	94	(70-130)	30	4.7
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0258	ug/L	103	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0266	ug/L	107	(70-130)	30	3.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	108	(50-150)		
MS1_202007290444	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0257	ug/L	103	(70-130)		
MSD1_202007290444	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0250	ug/L	100	(70-130)	30	2.9
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0259	ug/L	103	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0261	ug/L	104	(70-130)	30	0.77
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00216	ug/L	108	(50-150)		
MS1_202007290444	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0247	ug/L	99	(70-130)		
MSD1_202007290444	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0251	ug/L	100	(70-130)	30	1.6
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0214	ug/L	97	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0214	ug/L	97	(70-130)	30	0.47
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00172	ug/L	98	(50-150)		
MS1_202007290444	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0210	ug/L	95	(70-130)		
MSD1_202007290444	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0218	ug/L	98	(70-130)	30	3.8
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0239	ug/L	96	(70-130)	30	7.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00214	ug/L	107	(50-150)		
MS1_202007290444	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0235	ug/L	94	(70-130)		
MSD1_202007290444	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0241	ug/L	96	(70-130)	30	2.3
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0243	ug/L	97	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0242	ug/L	97	(70-130)	30	0.41
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00194	ug/L	97	(50-150)		
MS1_202007290444	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0233	ug/L	93	(70-130)		
MSD1_202007290444	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0235	ug/L	94	(70-130)	30	0.71
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0276	ug/L	111	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0273	ug/L	109	(70-130)	30	1.1

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00225	ug/L	113	(50-150)		
MS1_202007290444	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0265	ug/L	106	(70-130)		
MSD1_202007290444	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0272	ug/L	109	(70-130)	30	2.6
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0247	ug/L	108	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0249	ug/L	109	(70-130)	30	0.81
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00197	ug/L	108	(50-150)		
MS1_202007290444	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0244	ug/L	107	(70-130)		
MSD1_202007290444	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0239	ug/L	105	(70-130)	30	2.1
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0263	ug/L	105	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0266	ug/L	106	(70-130)	30	1.1
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00221	ug/L	110	(50-150)		
MS1_202007290444	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0251	ug/L	100	(70-130)		
MSD1_202007290444	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0260	ug/L	103	(70-130)	30	3.6
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0260	ug/L	104	(70-130)	30	1.2
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00209	ug/L	105	(50-150)		
MS1_202007290444	Perfluorononanoic acid (PFNA)	ND	0.025	0.0248	ug/L	99	(70-130)		
MSD1_202007290444	Perfluorononanoic acid (PFNA)	ND	0.025	0.0251	ug/L	100	(70-130)	30	1.1
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0243	ug/L	105	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0247	ug/L	107	(70-130)	30	1.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00195	ug/L	105	(50-150)		
MS1_202007290444	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0239	ug/L	103	(70-130)		
MSD1_202007290444	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0238	ug/L	102	(70-130)	30	0.38
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0271	ug/L	109	(70-130)	30	1.9
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00221	ug/L	110	(50-150)		
MS1_202007290444	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0264	ug/L	105	(70-130)		
MSD1_202007290444	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0268	ug/L	107	(70-130)	30	1.6
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0281	ug/L	112	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0286	ug/L	114	(70-130)	30	1.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00225	ug/L	113	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202007290444	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0288	ug/L	115	(70-130)		
MSD1_202007290444	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0290	ug/L	116	(70-130)	30	0.80
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0240	ug/L	96	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0241	ug/L	97	(70-130)	30	0.42
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00198	ug/L	99	(50-150)		
MS1_202007290444	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0230	ug/L	92	(70-130)		
MSD1_202007290444	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0234	ug/L	94	(70-130)	30	1.7
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0246	ug/L	98	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0247	ug/L	99	(70-130)	30	0.41
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00202	ug/L	101	(50-150)		
MS1_202007290444	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0242	ug/L	97	(70-130)		
MSD1_202007290444	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0242	ug/L	97	(70-130)	30	0.038

ICPMS Metals by EPA 200.8

Analytical Batch: 1266161

Analysis Date: 08/05/2020

LCS1	Arsenic Total ICAP/MS		50	52.9	ug/L	106	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	50.5	ug/L	101	(85-115)	20	4.6
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.988	ug/L	99	(50-150)		
MS_202008050255	Arsenic Total ICAP/MS	ND	50	51.8	ug/L	104	(70-130)		
MS2_202007290537	Arsenic Total ICAP/MS	ND	50	58.9	ug/L	117	(70-130)		
MSD_202008050255	Arsenic Total ICAP/MS	ND	50	55.4	ug/L	111	(70-130)	20	6.7
MSD2_202007290537	Arsenic Total ICAP/MS	ND	50	59.0	ug/L	117	(70-130)	20	0.23
LCS1	Manganese Total ICAP/MS		100	102	ug/L	102	(85-115)		
LCS2	Manganese Total ICAP/MS		100	97.9	ug/L	98	(85-115)	20	4.1
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.05	ug/L	102	(50-150)		
MS_202008050255	Manganese Total ICAP/MS	ND	100	96.3	ug/L	96	(70-130)		
MS2_202007290537	Manganese Total ICAP/MS	8.9	100	110	ug/L	101	(70-130)		
MSD_202008050255	Manganese Total ICAP/MS	ND	100	100	ug/L	100	(70-130)	20	3.8
MSD2_202007290537	Manganese Total ICAP/MS	8.9	100	111	ug/L	102	(70-130)	20	0.64
LCS1	Uranium ICAP/MS		50	50.5	ug/L	101	(85-115)		
LCS2	Uranium ICAP/MS		50	48.8	ug/L	98	(85-115)	20	3.4
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.979	ug/L	98	(50-150)		
MS_202008050255	Uranium ICAP/MS	ND	50	47.4	ug/L	95	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 884399  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202007290537	Uranium ICAP/MS	ND	50	53.8	ug/L	108	(70-130)		
MSD_202008050255	Uranium ICAP/MS	ND	50	50.3	ug/L	101	(70-130)	20	6.0
MSD2_202007290537	Uranium ICAP/MS	ND	50	54.1	ug/L	108	(70-130)	20	0.52

**Total Organic Carbon by SM 5310C**

**Analytical Batch: 1266174**

**Analysis Date: 08/05/2020**

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Total Organic Carbon		5	4.64	mg/L	93	(90-110)		
LCS2	Total Organic Carbon		5	4.74	mg/L	95	(90-110)	20	2.1
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.261	mg/L	131	(50-150)		
MS_202007240205	Total Organic Carbon	0.59	4	4.29	mg/L	93	(80-120)		
MS2_202007310470	Total Organic Carbon	1.2	2	3.17	mg/L	96	(80-120)		
MSD_202007240205	Total Organic Carbon	0.59	4	4.32	mg/L	93	(80-120)	20	0.72
MSD2_202007310470	Total Organic Carbon	1.2	2	3.16	mg/L	96	(80-120)	20	0.22

**Total Dissolved Solids (TDS) by E160.1/SM2540C**

**Analytical Batch: 1266286**

**Analysis Date: 08/05/2020**

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007300210	Total Dissolved Solid (TDS)	570		574	mg/L		(0-10)	10	1.1
DUP_202007310200	Total Dissolved Solid (TDS)	240		256	mg/L		(0-10)	10	7.3
LCS1	Total Dissolved Solid (TDS)		175	178	mg/L	102	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	702	mg/L	100	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	13.0	mg/L	130	(50-150)		

**Perchlorate by EPA 314.0**

**Analytical Batch: 1266293**

**Analysis Date: 08/05/2020**

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perchlorate		25	25.5	ug/L	102	(85-115)		
LCS2	Perchlorate		25	25.4	ug/L	101	(85-115)	15	0.39
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	3.99	ug/L	100	(75-125)		
MS_202007290558	Perchlorate	ND	25	22.9	ug/L	92	(80-120)		
MSD_202007290558	Perchlorate	ND	25	22.8	ug/L	91	(80-120)	15	0.43

**Volatile Organics by GCMS by EPA 524.2**

**Analytical Batch: 1266299**

**Analysis Date: 08/05/2020**

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	1,1,1,2-Tetrachloroethane		5	5.69	ug/L	114	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	5.56	ug/L	111	(70-130)	20	2.3
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.670	ug/L	134	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	1,1,1-Trichloroethane		5	5.20	ug/L	104	(70-130)		
LCS2	1,1,1-Trichloroethane		5	5.35	ug/L	107	(70-130)	20	2.8
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.10	ug/L	102	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	5.34	ug/L	107	(70-130)	20	4.6
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.380	ug/L	76	(50-150)		
LCS1	1,1,2-Trichloroethane		5	5.04	ug/L	101	(70-130)		
LCS2	1,1,2-Trichloroethane		5	5.28	ug/L	106	(70-130)	20	4.7
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.340	ug/L	68	(50-150)		
LCS1	1,1-Dichloroethane		5	4.93	ug/L	99	(70-130)		
LCS2	1,1-Dichloroethane		5	5.19	ug/L	104	(70-130)	20	5.1
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.370	ug/L	74	(50-150)		
LCS1	1,1-Dichloroethylene		5	5.08	ug/L	102	(70-130)		
LCS2	1,1-Dichloroethylene		5	5.23	ug/L	105	(70-130)	20	2.9
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,1-Dichloropropene		5	5.17	ug/L	103	(70-130)		
LCS2	1,1-Dichloropropene		5	5.39	ug/L	108	(70-130)	20	4.2
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.370	ug/L	74	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	8.50	ug/L	<u>170</u>	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	6.07	ug/L	121	(70-130)	20	<u>33</u>
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.830	ug/L	<u>166</u>	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.30	ug/L	106	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.01	ug/L	100	(70-130)	20	5.6
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.410	ug/L	82	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	6.14	ug/L	123	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	5.77	ug/L	115	(70-130)	20	6.2
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.630	ug/L	126	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.80	ug/L	96	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	5.11	ug/L	102	(70-130)	20	6.3

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 884399  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.360	ug/L	72	(50-150)		
LCS1	1,2-Dichloroethane		5	5.39	ug/L	108	(70-130)		
LCS2	1,2-Dichloroethane		5	5.48	ug/L	110	(70-130)	20	1.7
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.430	ug/L	86	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	99.8	%	100	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	96.6	%	97	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			99.0	%	99	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	97.8	%	98	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	98.2	%	98	(70-130)		
LCS1	1,2-Dichloropropane		5	5.01	ug/L	100	(70-130)		
LCS2	1,2-Dichloropropane		5	5.47	ug/L	109	(70-130)	20	8.8
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.390	ug/L	78	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.65	ug/L	93	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.93	ug/L	99	(70-130)	20	5.8
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.320	ug/L	64	(50-150)		
LCS1	1,3-Dichloropropane		5	5.08	ug/L	102	(70-130)		
LCS2	1,3-Dichloropropane		5	5.30	ug/L	106	(70-130)	20	4.2
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.430	ug/L	86	(50-150)		
LCS1	2,2-Dichloropropane		5	6.69	ug/L	<b>134</b>	(70-130)		
LCS2	2,2-Dichloropropane		5	6.48	ug/L	130	(70-130)	20	3.2
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.430	ug/L	86	(50-150)		
LCS1	2-Butanone (MEK)		50	53.0	ug/L	106	(70-130)		
LCS2	2-Butanone (MEK)		50	54.3	ug/L	109	(70-130)	20	2.4
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.19	ug/L	104	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	97.0	%	97	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	96.0	%	96	(70-130)		
MBLK	4-Bromofluorobenzene (S)			93.4	%	93	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	93.4	%	93	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	93.6	%	94	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	55.2	ug/L	110	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	55.6	ug/L	111	(70-130)	20	0.72

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.20	ug/L	84	(50-150)		
LCS1	Benzene		5	5.00	ug/L	100	(70-130)		
LCS2	Benzene		5	5.39	ug/L	108	(70-130)	20	7.5
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	Bromobenzene		5	5.09	ug/L	102	(70-130)		
LCS2	Bromobenzene		5	5.16	ug/L	103	(70-130)	20	1.4
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.370	ug/L	74	(50-150)		
LCS1	Bromochloromethane		5	4.91	ug/L	98	(70-130)		
LCS2	Bromochloromethane		5	5.27	ug/L	105	(70-130)	20	7.1
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.360	ug/L	72	(50-150)		
LCS1	Bromodichloromethane		5	5.33	ug/L	107	(70-130)		
LCS2	Bromodichloromethane		5	5.29	ug/L	106	(70-130)	20	0.75
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	Bromoethane		5	4.92	ug/L	98	(70-130)		
LCS2	Bromoethane		5	5.18	ug/L	104	(70-130)	20	5.2
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.400	ug/L	80	(50-150)		
LCS1	Bromoform		5	5.58	ug/L	112	(70-130)		
LCS2	Bromoform		5	5.48	ug/L	110	(70-130)	20	1.8
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.610	ug/L	122	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	4.33	ug/L	87	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	4.58	ug/L	92	(70-130)	20	5.6
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.370	ug/L	74	(50-150)		
LCS1	Carbon disulfide		5	4.81	ug/L	96	(70-130)		
LCS2	Carbon disulfide		5	4.86	ug/L	97	(70-130)	20	1.0
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.340	ug/L	68	(50-150)		
LCS1	Carbon Tetrachloride		5	5.23	ug/L	105	(70-130)		
LCS2	Carbon Tetrachloride		5	5.07	ug/L	101	(70-130)	20	3.1
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.460	ug/L	92	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Chlorobenzene		5	5.10	ug/L	102	(70-130)		
LCS2	Chlorobenzene		5	5.07	ug/L	101	(70-130)	20	0.59
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.380	ug/L	76	(50-150)		
LCS1	Chlorodibromomethane		5	5.40	ug/L	108	(70-130)		
LCS2	Chlorodibromomethane		5	5.53	ug/L	111	(70-130)	20	2.4
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.590	ug/L	118	(50-150)		
LCS1	Chloroethane		5	5.15	ug/L	103	(70-130)		
LCS2	Chloroethane		5	5.06	ug/L	101	(70-130)	20	1.8
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.440	ug/L	88	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.95	ug/L	99	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	5.20	ug/L	104	(70-130)	20	4.9
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.400	ug/L	80	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.49	ug/L	90	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.85	ug/L	97	(70-130)	20	7.7
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.460	ug/L	92	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.93	ug/L	99	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	5.20	ug/L	104	(70-130)	20	5.3
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.390	ug/L	78	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	5.92	ug/L	118	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	5.82	ug/L	116	(70-130)	20	1.7
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.590	ug/L	118	(50-150)		
LCS1	Dibromomethane		5	5.05	ug/L	101	(70-130)		
LCS2	Dibromomethane		5	5.09	ug/L	102	(70-130)	20	0.79
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.410	ug/L	82	(50-150)		
LCS1	Dichlorodifluoromethane		5	5.20	ug/L	104	(70-130)		
LCS2	Dichlorodifluoromethane		5	5.30	ug/L	106	(70-130)	20	1.9
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.430	ug/L	86	(50-150)		
LCS1	Dichloromethane		5	4.95	ug/L	99	(70-130)		
LCS2	Dichloromethane		5	5.14	ug/L	103	(70-130)	20	3.8

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.450	ug/L	90	(50-150)		
LCS1	Di-isopropyl ether		5	4.94	ug/L	99	(70-130)		
LCS2	Di-isopropyl ether		5	5.19	ug/L	104	(70-130)	20	4.9
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.430	ug/L	86	(50-150)		
LCS1	Ethyl benzene		5	4.97	ug/L	99	(70-130)		
LCS2	Ethyl benzene		5	5.20	ug/L	104	(70-130)	20	4.5
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.350	ug/L	70	(50-150)		
LCS1	Hexachlorobutadiene		5	5.70	ug/L	114	(70-130)		
LCS2	Hexachlorobutadiene		5	5.72	ug/L	114	(70-130)	20	0.35
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.570	ug/L	114	(50-150)		
LCS1	Isopropylbenzene		5	5.00	ug/L	100	(70-130)		
LCS2	Isopropylbenzene		5	5.20	ug/L	104	(70-130)	20	3.9
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.360	ug/L	72	(50-150)		
LCS1	m,p-Xylenes		10	10.4	ug/L	104	(70-130)		
LCS2	m,p-Xylenes		10	10.9	ug/L	109	(70-130)	20	4.7
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.700	ug/L	70	(50-150)		
MRLLW	m,p-Xylenes		0.5	0.460	ug/L	92	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	5.04	ug/L	101	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	5.37	ug/L	107	(70-130)	20	6.3
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.390	ug/L	78	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	5.51	ug/L	110	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	5.70	ug/L	114	(70-130)	20	3.4
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.380	ug/L	76	(50-150)		
LCS1	Naphthalene		5	8.62	ug/L	<b>172</b>	(70-130)		
LCS2	Naphthalene		5	5.98	ug/L	120	(70-130)	20	<b>36</b>
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.890	ug/L	<b>178</b>	(50-150)		
LCS1	n-Butylbenzene		5	4.99	ug/L	100	(70-130)		
LCS2	n-Butylbenzene		5	5.27	ug/L	105	(70-130)	20	5.5
MBLK	n-Butylbenzene			<0.5	ug/L				

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	n-Butylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	n-Propylbenzene		5	5.15	ug/L	103	(70-130)		
LCS2	n-Propylbenzene		5	5.20	ug/L	104	(70-130)	20	0.97
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.340	ug/L	68	(50-150)		
LCS1	o-Chlorotoluene		5	4.94	ug/L	99	(70-130)		
LCS2	o-Chlorotoluene		5	5.14	ug/L	103	(70-130)	20	4.0
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.400	ug/L	80	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	5.03	ug/L	101	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	5.31	ug/L	106	(70-130)	20	5.4
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.420	ug/L	84	(50-150)		
LCS1	o-Xylene		5	5.08	ug/L	102	(70-130)		
LCS2	o-Xylene		5	5.41	ug/L	108	(70-130)	20	6.3
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.390	ug/L	78	(50-150)		
LCS1	p-Chlorotoluene		5	4.97	ug/L	99	(70-130)		
LCS2	p-Chlorotoluene		5	5.12	ug/L	102	(70-130)	20	3.0
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.390	ug/L	78	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	5.17	ug/L	103	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.30	ug/L	106	(70-130)	20	2.5
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.440	ug/L	88	(50-150)		
LCS1	p-Isopropyltoluene		5	5.07	ug/L	101	(70-130)		
LCS2	p-Isopropyltoluene		5	5.27	ug/L	105	(70-130)	20	3.9
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.330	ug/L	66	(50-150)		
LCS1	sec-Butylbenzene		5	4.95	ug/L	99	(70-130)		
LCS2	sec-Butylbenzene		5	5.29	ug/L	106	(70-130)	20	6.6
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	Styrene		5	4.95	ug/L	99	(70-130)		
LCS2	Styrene		5	5.10	ug/L	102	(70-130)	20	3.0
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.370	ug/L	74	(50-150)		
LCS1	tert-amyl Methyl Ether		5	6.45	ug/L	129	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 884399  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	tert-amyl Methyl Ether		5	6.76	ug/L	<b>135</b>	(70-130)	20	4.7
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.510	ug/L	102	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	6.41	ug/L	128	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	6.35	ug/L	127	(70-130)	20	0.94
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.450	ug/L	90	(50-150)		
LCS1	tert-Butylbenzene		5	4.94	ug/L	99	(70-130)		
LCS2	tert-Butylbenzene		5	5.13	ug/L	103	(70-130)	20	3.8
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.330	ug/L	66	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	5.18	ug/L	104	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	5.31	ug/L	106	(70-130)	20	2.5
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.390	ug/L	78	(50-150)		
LCS1	Toluene		5	4.96	ug/L	99	(70-130)		
LCS2	Toluene		5	5.01	ug/L	100	(70-130)	20	1.0
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.370	ug/L	74	(50-150)		
LCS1	Toluene-d8 (S)		5	102	%	102	(70-130)		
LCS2	Toluene-d8 (S)		5	100	%	100	(70-130)		
MBLK	Toluene-d8 (S)			95.8	%	96	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	98.6	%	99	(70-130)		
MRLW	Toluene-d8 (S)		5	96.4	%	96	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.95	ug/L	99	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	5.30	ug/L	106	(70-130)	20	6.8
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.370	ug/L	74	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	6.47	ug/L	129	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	6.23	ug/L	125	(70-130)	20	3.8
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.650	ug/L	130	(50-150)		
LCS1	Trichloroethylene (TCE)		5	5.13	ug/L	103	(70-130)		
LCS2	Trichloroethylene (TCE)		5	5.30	ug/L	106	(70-130)	20	3.3
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.400	ug/L	80	(50-150)		
LCS1	Trichlorofluoromethane		5	5.04	ug/L	101	(70-130)		
LCS2	Trichlorofluoromethane		5	5.20	ug/L	104	(70-130)	20	3.1

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.350	ug/L	70	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	5.24	ug/L	105	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	5.34	ug/L	107	(70-130)	20	1.9
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.380	ug/L	76	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.81	ug/L	96	(70-130)		
LCS2	Vinyl chloride (VC)		5	4.72	ug/L	94	(70-130)	20	1.9
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.430	ug/L	86	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.280	ug/L	112	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1265933 Analytical Batch: 1266344

Analysis Date: 08/05/2020

DUP_202008040302	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0257	ug/L	109	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0253	ug/L	107	(70-130)	30	1.6
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00205	ug/L	109	(50-150)		
MS_202008040300	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00204	ug/L	108	(50-150)		
DUP_202008040302	13C2-PFDA (S)			95.5	%	95	(70-130)		
LCS1	13C2-PFDA (S)		100	98.9	%	99	(70-130)		
LCS2	13C2-PFDA (S)		100	98.1	%	98	(70-130)		
MBLK	13C2-PFDA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.6	%	99	(70-130)		
MS_202008040300	13C2-PFDA (S)		100	102	%	102	(70-130)		
DUP_202008040302	13C2-PFHxA (S)			105	%	105	(70-130)		
LCS1	13C2-PFHxA (S)		100	107	%	107	(70-130)		
LCS2	13C2-PFHxA (S)		100	108	%	108	(70-130)		
MBLK	13C2-PFHxA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MS_202008040300	13C2-PFHxA (S)		100	110	%	110	(70-130)		
DUP_202008040302	13C2-PFOA- IS#1 (I)			107	%	107	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MS_202008040300	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 884399  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008040302	13C3-HFPO-DA (S)			100	%	100	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MBLK	13C3-HFPO-DA (S)			102	%	102	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MS_202008040300	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
DUP_202008040302	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	99.7	%	100	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
MS_202008040300	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
DUP_202008040302	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0275	ug/L	116	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0281	ug/L	119	(70-130)	30	2.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00222	ug/L	118	(50-150)		
MS_202008040300	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00235	ug/L	125	(50-150)		
DUP_202008040302	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0262	ug/L	113	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0254	ug/L	109	(70-130)	30	3.1
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00208	ug/L	112	(50-150)		
MS_202008040300	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00217	ug/L	117	(50-150)		
DUP_202008040302	d3-NMeFOSAA (I)			105	%	105	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			101	%	101	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	99.8	%	100	(50-150)		
MS_202008040300	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
DUP_202008040302	d5-NEtFOSAA (S)			94.4	%	94	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	94.3	%	94	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	99.1	%	99	(70-130)		
MBLK	d5-NEtFOSAA (S)			96.6	%	97	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	93.8	%	94	(70-130)		
MS_202008040300	d5-NEtFOSAA (S)		100	95.8	%	96	(70-130)		
DUP_202008040302	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0271	ug/L	109	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 884399  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0282	ug/L	113	(70-130)	30	4.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00219	ug/L	109	(50-150)		
MS_202008040300	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00228	ug/L	114	(50-150)		
DUP_202008040302	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0268	ug/L	107	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0269	ug/L	108	(70-130)	30	0.37
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00222	ug/L	111	(50-150)		
MS_202008040300	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00219	ug/L	109	(50-150)		
DUP_202008040302	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0264	ug/L	106	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0278	ug/L	111	(70-130)	30	5.2
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00226	ug/L	113	(50-150)		
MS_202008040300	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00220	ug/L	110	(50-150)		
DUP_202008040302	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0266	ug/L	120	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0259	ug/L	117	(70-130)	30	2.7
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00214	ug/L	121	(50-150)		
MS_202008040300	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00226	ug/L	128	(50-150)		
DUP_202008040302	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0280	ug/L	112	(70-130)	30	0.71
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00231	ug/L	116	(50-150)		
MS_202008040300	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00230	ug/L	115	(50-150)		
DUP_202008040302	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0279	ug/L	112	(70-130)	30	0.0
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00226	ug/L	113	(50-150)		
MS_202008040300	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00223	ug/L	112	(50-150)		
DUP_202008040302	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0303	ug/L	121	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0313	ug/L	125	(70-130)	30	3.3
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				

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 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 884399  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00248	ug/L	124	(50-150)		
MS_202008040300	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00258	ug/L	127	(50-150)		
DUP_202008040302	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0276	ug/L	121	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0273	ug/L	120	(70-130)	30	1.1
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00225	ug/L	123	(50-150)		
MS_202008040300	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00232	ug/L	127	(50-150)		
DUP_202008040302	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0289	ug/L	116	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0314	ug/L	126	(70-130)	30	8.3
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00245	ug/L	122	(50-150)		
MS_202008040300	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00257	ug/L	124	(50-150)		
DUP_202008040302	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0279	ug/L	112	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0284	ug/L	114	(70-130)	30	1.8
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00235	ug/L	117	(50-150)		
MS_202008040300	Perfluorononanoic acid (PFNA)	ND	0.002	0.00250	ug/L	125	(50-150)		
DUP_202008040302	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0258	ug/L	112	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0262	ug/L	113	(70-130)	30	1.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00219	ug/L	118	(50-150)		
MS_202008040300	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00228	ug/L	119	(50-150)		
DUP_202008040302	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0295	ug/L	118	(70-130)	30	4.2
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00242	ug/L	121	(50-150)		
MS_202008040300	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00260	ug/L	125	(50-150)		
DUP_202008040302	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0317	ug/L	127	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0318	ug/L	127	(70-130)	30	0.32
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00259	ug/L	129	(50-150)		
MS_202008040300	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00258	ug/L	125	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 884399  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008040302	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0279	ug/L	112	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0275	ug/L	110	(70-130)	30	1.4
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00224	ug/L	112	(50-150)		
MS_202008040300	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00227	ug/L	113	(50-150)		
DUP_202008040302	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0274	ug/L	110	(70-130)	30	1.1
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202008040300	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00218	ug/L	109	(50-150)		

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1267424

Analysis Date: 08/10/2020

LCS1	Hexavalent chromium(Dissolved)		2	1.92	ug/L	96	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.92	ug/L	96	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0185	ug/L	93	(50-150)		
MS_202007300286	Hexavalent chromium(Dissolved)	0.67	2	2.82	ug/L	108	(90-110)		
MSD_202007300286	Hexavalent chromium(Dissolved)	0.67	2	2.82	ug/L	108	(90-110)	20	0.12

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Non-Compliance Report of Analysis by 18-Hour Colilert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attn: Joseph Liles

Project: 0250000
Phone #: 562-275-4226
Date Received: 07/30/2020
Sampled By:
Sample Project Group: WRD Pilot [Set #1]

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Fecal Coliform Small, Fecal Coliform Large), MPN/100 mL (Fecal Coliform), Presence/Absence (P/A)\* (Fecal Coliform)

Lab Notification:
fix pricing

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required NO

Approved by

Date of Issue: 08/18/2020



**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 08/18/2020

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)\*

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 08/18/2020

Quant Report - Page 1 of 1

, Tel Fax

## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-34684-1  
Client Project/Site: 884399

For:  
Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:  
8/10/2020 11:00:38 AM

Lori Thompson, Project Manager I  
(714)895-5494  
[Lori.Thompson@eurofinset.com](mailto:Lori.Thompson@eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 884399

Job ID: 570-34684-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 884399

Job ID: 570-34684-1

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**Job ID: 570-34684-1**

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**Laboratory: Eurofins Calscience LLC**

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**Narrative**

**Job Narrative**  
**570-34684-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 7/31/2020 5:00 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.5° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Eurofins Eaton Analytical  
Project/Site: 884399

Job ID: 570-34684-1

## Client Sample ID: 202007300286

## Lab Sample ID: 570-34684-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	2.38		0.953	0.762	mg/L	1		1664A	Total/NA

## Client Sample ID: 202007300296

## Lab Sample ID: 570-34684-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	2.38		0.952	0.762	mg/L	1		1664A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 884399

Job ID: 570-34684-1

## General Chemistry

Client Sample ID: 202007300286

Date Collected: 07/30/20 10:27

Date Received: 07/31/20 17:00

Lab Sample ID: 570-34684-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	2.38		0.953	0.762	mg/L		08/05/20 14:53	08/05/20 14:53	1

Client Sample ID: 202007300296

Date Collected: 07/30/20 12:27

Date Received: 07/31/20 17:00

Lab Sample ID: 570-34684-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	2.38		0.952	0.762	mg/L		08/05/20 14:53	08/05/20 14:53	1

# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 884399

Job ID: 570-34684-1

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 570-85791/1-A**  
**Matrix: Water**  
**Analysis Batch: 85959**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 85791**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		08/05/20 09:30	08/05/20 09:30	1

**Lab Sample ID: LCS 570-85791/2-A**  
**Matrix: Water**  
**Analysis Batch: 85959**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 85791**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	35.90		mg/L		90	78 - 114

**Lab Sample ID: LCSD 570-85791/3-A**  
**Matrix: Water**  
**Analysis Batch: 85959**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 85791**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	37.00		mg/L		93	78 - 114	3	18

**Lab Sample ID: 570-34825-A-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 85959**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 85791**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	1.90		38.0	37.10		mg/L		93	78 - 114

**Lab Sample ID: 570-34825-A-1-B MSD**  
**Matrix: Water**  
**Analysis Batch: 85959**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 85791**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	1.90		38.0	36.28		mg/L		90	78 - 114	7	18

# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 884399

Job ID: 570-34684-1

## General Chemistry

### Prep Batch: 85791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-34684-1	202007300286	Total/NA	Water	1664A	
570-34684-2	202007300296	Total/NA	Water	1664A	
MB 570-85791/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-85791/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-85791/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
570-34825-A-1-A MS	Matrix Spike	Total/NA	Water	1664A	
570-34825-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	1664A	

### Analysis Batch: 85959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-34684-1	202007300286	Total/NA	Water	1664A	85791
570-34684-2	202007300296	Total/NA	Water	1664A	85791
MB 570-85791/1-A	Method Blank	Total/NA	Water	1664A	85791
LCS 570-85791/2-A	Lab Control Sample	Total/NA	Water	1664A	85791
LCSD 570-85791/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	85791
570-34825-A-1-A MS	Matrix Spike	Total/NA	Water	1664A	85791
570-34825-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	1664A	85791

# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 884399

Job ID: 570-34684-1

**Client Sample ID: 202007300286**

**Lab Sample ID: 570-34684-1**

**Date Collected: 07/30/20 10:27**

**Matrix: Water**

**Date Received: 07/31/20 17:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1049 mL	1000 mL	85791	08/05/20 14:53	UFLU	ECL 1
Total/NA	Analysis	1664A		1			85959	08/05/20 14:53	UFLU	ECL 1

Instrument ID: NOEQUIP

**Client Sample ID: 202007300296**

**Lab Sample ID: 570-34684-2**

**Date Collected: 07/30/20 12:27**

**Matrix: Water**

**Date Received: 07/31/20 17:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1050 mL	1000 mL	85791	08/05/20 14:53	UFLU	ECL 1
Total/NA	Analysis	1664A		1			85959	08/05/20 14:53	UFLU	ECL 1

Instrument ID: NOEQUIP

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 884399

Job ID: 570-34684-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

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# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 884399

Job ID: 570-34684-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

**Protocol References:**

1664A = EPA-821-98-002

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 884399

Job ID: 570-34684-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-34684-1	202007300286	Water	07/30/20 10:27	07/31/20 17:00	
570-34684-2	202007300296	Water	07/30/20 12:27	07/31/20 17:00	

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34684

Submittal Form

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder# 884399 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature.

Reports: Jackie Contreras Sub-Contracting Administrator  
EMAIL TO: us20\_subcontract@eurofins.com  
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
Phone (626) 386-1165 Fax (626) 386-1122  
Invoices to: Eurofins Eaton Analytical, LLC  
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix.  
Samples from: CALIFORNIA



570-34684 Chain of Custody

**eurofins** Eaton Analytical  
Ship To:  
Eurofins CalScience  
7440 Lincoln Way  
Garden Grove, CA 92641-1432  
Phone: 714-895-5494 Fax: 714-894-7501  
Folder #: 884399 Report Due: 08/13/2020

Sample ID: 202007300286 Client Sample ID for reference onl LH-INF-20200730 Sample Date & Time Matrix 07/30/20 1027 DW PWS Systemcode PWSID JLS  
Sample type: Oil and Grease by 1664(subbed) Facility ID: Sample Point ID: Static ID:

Method: EPA 1664 Analysis Requested: Oil and Grease by 1664(subbed)

Sample ID: 202007300296 Client Sample ID for reference onl MB-INF-20200730 Sample Date & Time Matrix 07/30/20 1227 DW PWS Systemcode PWSID JLS  
Sample type: Oil and Grease by 1664(subbed) Facility ID: Sample Point ID: Static ID:

Method: EPA 1664 Analysis Requested: Oil and Grease by 1664(subbed)

Relinquished by: f. Owens Sample Control Date: 7/31/20 Time: 14:00  
Received by: Matt B. Date: 7-31-20 Time: 14:42  
Relinquished by: Matt B. Sample Control Date: 7-31-20 Time: 17:00  
Received by: Lo B. ECF Date: 7-31-20 Time: 17:00

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS  
An Acknowledgment of Receipt is requested to attn: Jackie Contreras

# Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-34684-1

**Login Number: 34684**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Ramos, Maribel**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)



## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 885690  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

### STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 885690  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **August 06, 2020 at 1430**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202008060350</u>	GAC-1-20200806 Static ID: 537.1 @537.1	08/06/2020 1103
<u>202008060351</u>	GAC-2-20200806 Static ID: 537.1 @537.1	08/06/2020 1106
<u>202008060352</u>	GAC-3-20200806 Static ID: 537.1 @537.1	08/06/2020 1109
<u>202008060353</u>	GAC-4-20200806 Static ID: 537.1 @537.1	08/06/2020 1112
<u>202008060354</u>	IX-1-20200806 Static ID: 537.1 @537.1	08/06/2020 1115
<u>202008060355</u>	IX-2-20200806 Static ID: 537.1 @537.1	08/06/2020 1118
<u>202008060356</u>	IX-3-20200806 Static ID: 537.1 @537.1	08/06/2020 1121
<u>202008060357</u>	IX-4-20200806 Static ID: 537.1 @537.1	08/06/2020 1124
<u>202008060359</u>	LH-INF-20200806 @537.1 Chloride	08/06/2020 1127
	@ANIONS48 Sulfate	Alkalinity in CaCO3 units Total Organic Carbon
<u>202008060360</u>	GAC-5-20200806 @537.1	08/06/2020 1303
<u>202008060361</u>	GAC-6-20200806 @537.1	08/06/2020 1306

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 885690  
Project: 0250000  
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
Phone: 562-275-4226

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Phone:

The following samples were received from you on **August 06, 2020 at 1430**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202008060362</u>	GAC-7-20200806	08/06/2020 1309
	@537.1	
<u>202008060363</u>	GAC-8-20200806	08/06/2020 1312
	@537.1	
<u>202008060364</u>	IX-5-20200806	08/06/2020 1315
	@537.1	
<u>202008060365</u>	IX-6-20200806	08/06/2020 1318
	@537.1	
<u>202008060366</u>	IX-7-20200806	08/06/2020 1321
	@537.1	
<u>202008060367</u>	IX-8-20200806	08/06/2020 1324
	@537.1	
<u>202008060368</u>	MB-INF-20200806	08/06/2020 1327
	@537.1	@ANIONS48
	Chloride	Sulfate
		Alkalinity in CaCO3 units
		Total Organic Carbon
<u>202008060369</u>	FB-HOLD-20200806	08/06/2020 1330
	@537.1 FB	

#### Test Description

- @537.1 -- EPA Method 537.1
- @537.1 FB -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0

8856AD

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302									
TEL: (949) 679-1070		E-MAIL: mjeon@gsi-net.com		LAB CONTACT: Sophia Liang									
LABORATORY: Eurofins Eaton Analytical		GLOBAL ID:		SAMPLER(S): (PRINT) RST									
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.											
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdlorres@gsi-net.com. Provide EDD of sample results													
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Filtered	Unpreserved	Preserved	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	
		DATE	TIME										
	GAC-1-20200806	8-6	1103	Water	2			X	X				
	GAC-2-20200806		1106	Water	2			X	X				
	GAC-3-20200806		1109	Water	2			X	X				
	GAC-4-20200806		1112	Water	2			X	X				
	IX-1-20200806		1115	Water	2			X	X				
	IX-2-20200806		1118	Water	2			X	X				
	IX-3-20200806		1121	Water	2			X	X				
	IX-4-20200806		<del>1124</del> 1124	Water	2			X	X				
	LH-INF-20200806		<del>1127</del> 1127	Water	5			X	X	X			
	EH-INF-DUP			Water									
	GAC-5-20200806	8-6	1303	Water	2			X	X				
	GAC-6-20200806		1306	Water	2			X	X				
	GAC-7-20200806		1309	Water	2			X	X				
	GAC-8-20200806		1312	Water	2			X	X				
Relinquished by: (Signature) <i>[Signature]</i>										Received by: (Signature) <i>[Signature]</i>		Date: 8-6-2020	Time: 1430
Relinquished by: (Signature) <i>[Signature]</i>										Received by: (Signature) <i>[Signature]</i>		Date:	Time:
Relinquished by: (Signature) <i>[Signature]</i>										Received by: (Signature) <i>[Signature]</i>		Date:	Time:







Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 1430

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202008060355</b>				
		<b><u>IX-2-20200806</u></b>				
08/10/2020 15:22	Perfluorohexanoic acid (PFHxA)		0.0023		ug/L	0.0020
		<b>202008060356</b>				
		<b><u>IX-3-20200806</u></b>				
08/10/2020 15:41	Perfluorohexanoic acid (PFHxA)		0.0035		ug/L	0.0020
		<b>202008060357</b>				
		<b><u>IX-4-20200806</u></b>				
08/10/2020 18:14	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
		<b>202008060359</b>				
		<b><u>LH-INF-20200806</u></b>				
08/13/2020 02:33	Alkalinity in CaCO3 units		200		mg/L	2.0
08/06/2020 23:46	Chloride		110	250	mg/L	2.5
08/06/2020 23:46	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
08/06/2020 23:46	Nitrate as NO3 (calc)		12	45	mg/L	2.2
08/10/2020 18:24	Perfluorobutanesulfonic acid (PFBS)		0.0064		ug/L	0.0020
08/10/2020 18:24	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
08/10/2020 18:24	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
08/10/2020 18:24	Perfluorononanoic acid (PFNA)		0.0032		ug/L	0.0020
08/10/2020 18:24	Perfluorooctanesulfonic acid (PFOS)		0.033		ug/L	0.0020
08/10/2020 18:24	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
08/06/2020 23:46	Sulfate		180	250	mg/L	2.5
08/06/2020 23:46	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
08/12/2020 09:31	Total Organic Carbon		0.59		mg/L	0.30
		<b>202008060364</b>				
		<b><u>IX-5-20200806</u></b>				
08/11/2020 13:31	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
		<b>202008060365</b>				
		<b><u>IX-6-20200806</u></b>				
08/11/2020 13:41	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
		<b>202008060366</b>				
		<b><u>IX-7-20200806</u></b>				
08/11/2020 13:51	Perfluorohexanoic acid (PFHxA)		0.0057		ug/L	0.0020
		<b>202008060367</b>				
		<b><u>IX-8-20200806</u></b>				
08/11/2020 14:00	Perfluorohexanoic acid (PFHxA)		0.0048		ug/L	0.0020
		<b>202008060368</b>				
		<b><u>MB-INF-20200806</u></b>				
08/13/2020 23:13	Alkalinity in CaCO3 units		170		mg/L	2.0
08/06/2020 23:33	Chloride		51	250	mg/L	2.5
08/06/2020 23:33	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
08/06/2020 23:33	Nitrate as NO3 (calc)		11	45	mg/L	2.2
08/11/2020 13:03	Perfluorobutanesulfonic acid (PFBS)		0.0095		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 1430

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
08/11/2020 13:03	Perfluorodecanoic acid (PFDA)		0.0020		ug/L	0.0020
08/11/2020 13:03	Perfluoroheptanoic acid (PFHpA)		0.0039		ug/L	0.0020
08/11/2020 13:03	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
08/11/2020 13:03	Perfluorohexanoic acid (PFHxA)		0.0052		ug/L	0.0020
08/11/2020 13:03	Perfluorononanoic acid (PFNA)		0.0034		ug/L	0.0020
08/11/2020 13:03	Perfluorooctanesulfonic acid (PFOS)		0.038		ug/L	0.0020
08/11/2020 13:03	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
08/06/2020 23:33	Sulfate		78	250	mg/L	2.5
08/06/2020 23:33	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
08/12/2020 09:48	Total Organic Carbon		0.71		mg/L	0.30

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20200806 (202008060350)</b>					<b>Sampled on 08/06/2020 1103</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	13C2-PFDA	88	%		1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	13C2-PFHxA	93	%		1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	85	%		1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	100	%		1

<b>GAC-2-20200806 (202008060351)</b>					<b>Sampled on 08/06/2020 1106</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	13C2-PFDA	76	%		1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	13C2-PFHxA	84	%		1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	138	%		1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	74	%		1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	106	%		1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	100	%		1

**GAC-3-20200806 (202008060352)**

Sampled on 08/06/2020 1109

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	13C2-PFDA	87	%		1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	13C2-PFHxA	94	%		1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	86	%		1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**GAC-4-20200806 (202008060353)**

Sampled on 08/06/2020 1112

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	13C2-PFDA	77	%		1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	13C2-PFHxA	83	%		1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	133	%		1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	74	%		1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**IX-1-20200806 (202008060354)**

Static ID: 537.1

Sampled on 08/06/2020 1115

**EPA 537.1 - EPA Method 537.1**

08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.

(c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	13C2-PFDA	90	%		1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	13C2-PFHxA	97	%		1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	89	%		1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	109	%		1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**IX-2-20200806 (202008060355)**

**Sampled on 08/06/2020 1118**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0023	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	13C2-PFDA	93	%		1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	13C2-PFHxA	98	%		1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	90	%		1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	98	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	107	%		1
<b>IX-3-20200806 (202008060356)</b>						<b>Sampled on 08/06/2020 1121</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0035	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	13C2-PFDA	89	%		1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	13C2-PFHxA	93	%		1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	84	%		1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	106	%		1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	98	%		1

<b>IX-4-20200806 (202008060357)</b>						<b>Sampled on 08/06/2020 1124</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	13C2-PFDA	82	%		1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	13C2-PFHxA	87	%		1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	132	%		1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	78	%		1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	109	%		1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	106	%		1

**LH-INF-20200806 (202008060359)**

Sampled on 08/06/2020 1127

**SM 5310C - Total Organic Carbon**

08/12/20 09:31	1267505	(SM 5310C)	Total Organic Carbon	0.59	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

08/06/20 23:46	1266582	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
08/06/20 23:46	1266582	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
08/06/20 23:46	1266582	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
08/06/20 23:46	1266582	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

08/06/20 23:46	1266642	(EPA 300.0)	Chloride	110	mg/L	2.5	5
08/06/20 23:46	1266642	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0064	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0032	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.033	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	13C2-PFDA	89	%		1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	13C2-PFHxA	94	%		1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	83	%		1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	111	%		1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**SM 2320B - Alkalinity in CaCO3 units**

08/13/20 02:33	1268094	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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**GAC-5-20200806 (202008060360)**

**Sampled on 08/06/2020 1303**

**EPA 537.1 - EPA Method 537.1**

08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	13C2-PFDA	78	%		1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	13C2-PFHxA	84	%		1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	130	%		1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	77	%		1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	109	%		1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**GAC-6-20200806 (202008060361)**

Sampled on 08/06/2020 1306

**EPA 537.1 - EPA Method 537.1**

08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	13C2-PFDA	81	%		1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	13C2-PFHxA	90	%		1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	127	%		1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	81	%		1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	106	%		1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	101	%		1

**GAC-7-20200806 (202008060362)**

Sampled on 08/06/2020 1309

**EPA 537.1 - EPA Method 537.1**

08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	13C2-PFDA	81	%		1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	13C2-PFHxA	89	%		1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	83	%		1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**GAC-8-20200806 (202008060363)**

Sampled on 08/06/2020 1312

**EPA 537.1 - EPA Method 537.1**

08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	13C2-PFDA	94	%		1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	13C2-PFHxA	109	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	98	%		1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**IX-5-20200806 (202008060364)**

**Sampled on 08/06/2020 1315**

**EPA 537.1 - EPA Method 537.1**

08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	13C2-PFDA	115	%		1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	13C2-PFHxA	124	%		1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	13C3-HFPO-DA	116	%		1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	d3-NMeFOSAA	101	%		1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	d5-NEtFOSAA	113	%		1

**IX-6-20200806 (202008060365)**

**Sampled on 08/06/2020 1318**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 537.1 - EPA Method 537.1</b>									
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	13C2-PFDA	118	%		1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	13C2-PFHxA	128	%		1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	13C3-HFPO-DA	119	%		1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	d3-NMeFOSAA	98	%		1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	d5-NEtFOSAA	114	%		1

**IX-7-20200806 (202008060366)**

Sampled on 08/06/2020 1321

<b>EPA 537.1 - EPA Method 537.1</b>									
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0057	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	13C2-PFDA	119	%		1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	13C2-PFHxA	126	%		1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	13C3-HFPO-DA	121	%		1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	d3-NMeFOSAA	95	%		1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	d5-NEtFOSAA	116	%		1

**IX-8-20200806 (202008060367)**

Sampled on 08/06/2020 1324

**EPA 537.1 - EPA Method 537.1**

08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0048	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	13C2-PFDA	117	%		1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	13C2-PFHxA	126	%		1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	13C3-HFPO-DA	120	%		1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	d3-NMeFOSAA	98	%		1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	d5-NEtFOSAA	111	%		1

**MB-INF-20200806 (202008060368)**

Sampled on 08/06/2020 1327

**SM 5310C - Total Organic Carbon**

08/12/20 09:48	1267505	(SM 5310C)	Total Organic Carbon	0.71	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

08/06/20 23:33	1266582	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
08/06/20 23:33	1266582	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
08/06/20 23:33	1266582	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
08/06/20 23:33	1266582	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

08/06/20 23:33	1266642	(EPA 300.0)	Chloride	51	mg/L	2.5	5
08/06/20 23:33	1266642	(EPA 300.0)	Sulfate	78	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0095	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0020	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0039	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0052	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0034	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.038	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	13C2-PFDA	114	%		1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	13C2-PFHxA	125	%		1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	13C3-HFPO-DA	115	%		1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	d3-NMeFOSAA	96	%		1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	d5-NEtFOSAA	113	%		1

**SM 2320B - Alkalinity in CaCO3 units**

08/13/20 23:13	1268433	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
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**FB-HOLD-20200806 (202008060369)**

**Sampled on 08/06/2020 1330**

**EPA 537.1 - EPA Method 537.1**

08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	4,8-dioxo-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/06/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	13C2-PFDA	86	%		1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	13C2-PFHxA	96	%		1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	13C3-HFPO-DA	86	%		1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	d5-NEtFOSAA	96	%		1

Rounding on totals after summation.  
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**Report:** 885690  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1266582**

202008060359 LH-INF-20200806  
 202008060368 MB-INF-20200806

**Analysis Date: 08/06/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1266642**

202008060359 LH-INF-20200806  
 202008060368 MB-INF-20200806

**Analysis Date: 08/06/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**EPA Method 537.1**

**Prep Batch: 1266665 Analytical Batch: 1267398**

202008060350 GAC-1-20200806  
 202008060351 GAC-2-20200806  
 202008060352 GAC-3-20200806  
 202008060353 GAC-4-20200806  
 202008060354 IX-1-20200806  
 202008060355 IX-2-20200806  
 202008060356 IX-3-20200806  
 202008060357 IX-4-20200806  
 202008060359 LH-INF-20200806  
 202008060360 GAC-5-20200806  
 202008060361 GAC-6-20200806  
 202008060362 GAC-7-20200806  
 202008060363 GAC-8-20200806

**Analysis Date: 08/10/2020**

Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ

**Total Organic Carbon**

**Analytical Batch: 1267505**

202008060359 LH-INF-20200806  
 202008060368 MB-INF-20200806

**Analysis Date: 08/12/2020**

Analyzed by: ZB2Z  
 Analyzed by: ZB2Z

**EPA Method 537.1**

**Prep Batch: 1266855 Analytical Batch: 1267872**

202008060364 IX-5-20200806  
 202008060365 IX-6-20200806  
 202008060366 IX-7-20200806  
 202008060367 IX-8-20200806  
 202008060368 MB-INF-20200806

**Analysis Date: 08/11/2020**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM

**Alkalinity in CaCO3 units**

**Analytical Batch: 1268094**

202008060359 LH-INF-20200806

**Analysis Date: 08/13/2020**

Analyzed by: ZS6I

**Alkalinity in CaCO3 units**

**Analytical Batch: 1268433**

202008060368 MB-INF-20200806

**Analysis Date: 08/13/2020**

Analyzed by: ZS6I

**EPA Method 537.1**

**Prep Batch: 1268005 Analytical Batch: 1268907**

**Analysis Date: 08/14/2020**



Eaton Analytical

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**Laboratory QC Summary**

**Report:** 885690  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

202008060369

FB-HOLD-20200806

Analyzed by: SZZ

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1266582</b>					<b>Analysis Date: 08/06/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.60	mg/L	104	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.60	mg/L	104	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0482	mg/L	96	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0112	mg/L	90	(50-150)		
MS_202008060423	Nitrate as Nitrogen by IC	9.8	2.6	12.6	mg/L	108	(80-120)		
MS_202008060535	Nitrate as Nitrogen by IC	8.6	6.5	15.2	mg/L	106	(80-120)		
MSD_202008060423	Nitrate as Nitrogen by IC	9.8	2.6	12.6	mg/L	109	(80-120)	20	0.35
MSD_202008060535	Nitrate as Nitrogen by IC	8.6	6.5	15.3	mg/L	107	(80-120)	20	0.49
LCS1	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.03	mg/L	103	(90-110)	20	0.98
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0435	mg/L	87	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0125	mg/L	100	(50-150)		
MS_202008060423	Nitrite Nitrogen by IC	ND	1	1.02	mg/L	102	(80-120)		
MS_202008060535	Nitrite Nitrogen by IC	ND	2.5	2.50	mg/L	100	(80-120)		
MSD_202008060423	Nitrite Nitrogen by IC	ND	1	1.03	mg/L	103	(80-120)	20	0.83
MSD_202008060535	Nitrite Nitrogen by IC	ND	2.5	2.54	mg/L	102	(80-120)	20	1.5
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1266642</b>					<b>Analysis Date: 08/06/2020</b>				
LCS1	Chloride		25	26.9	mg/L	108	(90-110)		
LCS2	Chloride		25	27.0	mg/L	108	(90-110)	20	0.37
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.465	mg/L	93	(50-150)		
MS_202008070546	Chloride	46	26	73.8	mg/L	111	(80-120)		
MSD_202008070546	Chloride	46	26	74.0	mg/L	112	(80-120)	20	0.32
LCS1	Sulfate		50	53.2	mg/L	106	(90-110)		
LCS2	Sulfate		50	53.2	mg/L	106	(90-110)	20	0.0
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	1.02	mg/L	102	(50-150)		
MRL_W	Sulfate		0.25	0.253	mg/L	101	(50-150)		
MS_202008070546	Sulfate	79	50	134	mg/L	111	(80-120)		
MSD_202008070546	Sulfate	79	50	135	mg/L	112	(80-120)	20	0.42

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



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Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>EPA Method 537.1 by EPA 537.1</b>									
<b>Prep Batch: 1266665 Analytical Batch: 1267398</b>					<b>Analysis Date: 08/10/2020</b>				
DUP_202008060356	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0473	ug/L	100	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0488	ug/L	104	(70-130)	30	3.1
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00185	ug/L	98	(50-150)		
MS2_202008060355	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0461	ug/L	98	(70-130)		
DUP_202008060356	13C2-PFDA (S)			89.5	%	90	(70-130)		
LCS3	13C2-PFDA (S)		100	98.3	%	98	(70-130)		
LCS4	13C2-PFDA (S)		100	98.1	%	98	(70-130)		
MBLK	13C2-PFDA (S)			105	%	105	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.3	%	98	(70-130)		
MS2_202008060355	13C2-PFDA (S)		100	88.6	%	89	(70-130)		
DUP_202008060356	13C2-PFHxA (S)			98.6	%	99	(70-130)		
LCS3	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS4	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFHxA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MS2_202008060355	13C2-PFHxA (S)		100	98.0	%	98	(70-130)		
DUP_202008060356	13C2-PFOA- IS#1 (I)			116	%	116	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	92.6	%	93	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	97.8	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			103	%	103	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	93.8	%	94	(50-150)		
MS2_202008060355	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
DUP_202008060356	13C3-HFPO-DA (S)			89.4	%	89	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	99.0	%	99	(70-130)		
MBLK	13C3-HFPO-DA (S)			97.0	%	97	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	99.3	%	99	(70-130)		
MS2_202008060355	13C3-HFPO-DA (S)		100	88.5	%	88	(70-130)		
DUP_202008060356	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	92.3	%	92	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	95.4	%	95	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			99.9	%	100	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	95.5	%	95	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202008060355	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
DUP_202008060356	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0524	ug/L	108	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0538	ug/L	111	(70-130)	30	2.6
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00226	ug/L	120	(50-150)		
MS2_202008060355	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0477	ug/L	98	(70-130)		
DUP_202008060356	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0494	ug/L	106	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0495	ug/L	106	(70-130)	30	0.20
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00203	ug/L	109	(50-150)		
MS2_202008060355	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0463	ug/L	99	(70-130)		
DUP_202008060356	d3-NMeFOSAA (I)			99.3	%	99	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	90.6	%	91	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	97.6	%	98	(50-150)		
MBLK	d3-NMeFOSAA (I)			87.3	%	87	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	85.9	%	86	(50-150)		
MS2_202008060355	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
DUP_202008060356	d5-NEtFOSAA (S)			97.8	%	98	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	94.7	%	95	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	93.6	%	94	(70-130)		
MBLK	d5-NEtFOSAA (S)			110	%	110	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	99.8	%	100	(70-130)		
MS2_202008060355	d5-NEtFOSAA (S)		100	94.7	%	95	(70-130)		
DUP_202008060356	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0544	ug/L	109	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0539	ug/L	108	(70-130)	30	0.92
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00226	ug/L	113	(50-150)		
MS2_202008060355	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0488	ug/L	98	(70-130)		
DUP_202008060356	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0537	ug/L	107	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0528	ug/L	106	(70-130)	30	1.5
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00245	ug/L	123	(50-150)		
MS2_202008060355	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0522	ug/L	104	(70-130)		
DUP_202008060356	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0545	ug/L	109	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0545	ug/L	109	(70-130)	30	0.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00233	ug/L	117	(50-150)		
MS2_202008060355	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0529	ug/L	106	(70-130)		
DUP_202008060356	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0501	ug/L	113	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0491	ug/L	111	(70-130)	30	2.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00205	ug/L	116	(50-150)		
MS2_202008060355	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0497	ug/L	111	(70-130)		
DUP_202008060356	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0538	ug/L	108	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0552	ug/L	110	(70-130)	30	2.6
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00231	ug/L	116	(50-150)		
MS2_202008060355	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0494	ug/L	99	(70-130)		
DUP_202008060356	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0559	ug/L	112	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0553	ug/L	111	(70-130)	30	1.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00238	ug/L	119	(50-150)		
MS2_202008060355	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0475	ug/L	95	(70-130)		
DUP_202008060356	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0584	ug/L	117	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0592	ug/L	118	(70-130)	30	1.2
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00259	ug/L	130	(50-150)		
MS2_202008060355	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0538	ug/L	107	(70-130)		
DUP_202008060356	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0523	ug/L	115	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0527	ug/L	116	(70-130)	30	0.76
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00213	ug/L	117	(50-150)		
MS2_202008060355	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0504	ug/L	111	(70-130)		
DUP_202008060356	Perfluorohexanoic acid (PFHxA)	0.0035		0.00344	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0578	ug/L	116	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0586	ug/L	117	(70-130)	30	1.4

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00257	ug/L	128	(50-150)		
MS2_202008060355	Perfluorohexanoic acid (PFHxA)	0.0023	0.05	0.0549	ug/L	105	(70-130)		
DUP_202008060356	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0552	ug/L	110	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0559	ug/L	112	(70-130)	30	1.3
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00242	ug/L	121	(50-150)		
MS2_202008060355	Perfluorononanoic acid (PFNA)	ND	0.05	0.0507	ug/L	101	(70-130)		
DUP_202008060356	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0510	ug/L	110	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0510	ug/L	110	(70-130)	30	0.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00230	ug/L	124	(50-150)		
MS2_202008060355	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0505	ug/L	109	(70-130)		
DUP_202008060356	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0574	ug/L	115	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0581	ug/L	116	(70-130)	30	1.2
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00250	ug/L	125	(50-150)		
MS2_202008060355	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0547	ug/L	109	(70-130)		
DUP_202008060356	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0563	ug/L	113	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0574	ug/L	115	(70-130)	30	1.9
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00229	ug/L	114	(50-150)		
MS2_202008060355	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0534	ug/L	107	(70-130)		
DUP_202008060356	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0559	ug/L	112	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0555	ug/L	111	(70-130)	30	0.72
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00225	ug/L	112	(50-150)		
MS2_202008060355	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0468	ug/L	94	(70-130)		
DUP_202008060356	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0540	ug/L	108	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0538	ug/L	108	(70-130)	30	0.19
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00222	ug/L	111	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 885690  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202008060355	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0478	ug/L	96	(70-130)		

**Total Organic Carbon by SM 5310C**

Analytical Batch: 1267505

Analysis Date: 08/12/2020

LCS1	Total Organic Carbon		5	4.61	mg/L	92	(90-110)		
LCS2	Total Organic Carbon		5	4.63	mg/L	93	(90-110)	20	0.43
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.234	mg/L	117	(50-150)		
MS_202008060456	Total Organic Carbon	ND	4	3.99	mg/L	98	(80-120)		
MS2_202008070404	Total Organic Carbon	2.1	2	4.13	mg/L	103	(80-120)		
MSD_202008060456	Total Organic Carbon	ND	4	3.98	mg/L	98	(80-120)	20	0.23
MSD2_202008070404	Total Organic Carbon	2.1	2	4.21	mg/L	108	(80-120)	20	2.0

**EPA Method 537.1 by EPA 537.1**

Prep Batch: 1266855 Analytical Batch: 1267872

Analysis Date: 08/11/2020

DUP_202008060368	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0556	ug/L	118	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0556	ug/L	118	(70-130)	30	0.0
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00202	ug/L	108	(50-150)		
MS2_202008060448	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0564	ug/L	120	(70-130)		
DUP_202008060368	13C2-PFDA (S)			110	%	110	(70-130)		
LCS3	13C2-PFDA (S)		100	116	%	116	(70-130)		
LCS4	13C2-PFDA (S)		100	114	%	114	(70-130)		
MBLK	13C2-PFDA (S)			115	%	115	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	109	%	109	(70-130)		
MS2_202008060448	13C2-PFDA (S)		100	118	%	118	(70-130)		
DUP_202008060368	13C2-PFHxA (S)			126	%	126	(70-130)		
LCS3	13C2-PFHxA (S)		100	122	%	122	(70-130)		
LCS4	13C2-PFHxA (S)		100	119	%	119	(70-130)		
MBLK	13C2-PFHxA (S)			123	%	123	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	117	%	117	(70-130)		
MS2_202008060448	13C2-PFHxA (S)		100	123	%	123	(70-130)		
DUP_202008060368	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	94.5	%	95	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MS2_202008060448	13C2-PFOA- IS#1 (I)		100	96.1	%	96	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008060368	13C3-HFPO-DA (S)			110	%	110	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	118	%	118	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	118	%	118	(70-130)		
MBLK	13C3-HFPO-DA (S)			118	%	119	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	111	%	111	(70-130)		
MS2_202008060448	13C3-HFPO-DA (S)		100	116	%	116	(70-130)		
DUP_202008060368	13C4-PFOS- IS#2 (I)			96.8	%	97	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	94.0	%	94	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	97.2	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			97.5	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MS2_202008060448	13C4-PFOS- IS#2 (I)		100	94.8	%	95	(50-150)		
DUP_202008060368	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0577	ug/L	119	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0581	ug/L	120	(70-130)	30	0.69
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00219	ug/L	116	(50-150)		
MS2_202008060448	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0586	ug/L	121	(70-130)		
DUP_202008060368	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0550	ug/L	118	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0567	ug/L	122	(70-130)	30	3.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00195	ug/L	105	(50-150)		
MS2_202008060448	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0562	ug/L	121	(70-130)		
DUP_202008060368	d3-NMeFOSAA (I)			98.4	%	98	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	97.7	%	98	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MBLK	d3-NMeFOSAA (I)			102	%	102	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MS2_202008060448	d3-NMeFOSAA (I)		100	99.4	%	99	(50-150)		
DUP_202008060368	d5-NEtFOSAA (S)			112	%	112	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MBLK	d5-NEtFOSAA (S)			108	%	109	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
MS2_202008060448	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
DUP_202008060368	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0576	ug/L	115	(70-130)		

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Report: 885690  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0591	ug/L	118	(70-130)	30	2.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00209	ug/L	105	(50-150)		
MS2_202008060448	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0583	ug/L	117	(70-130)		
DUP_202008060368	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0556	ug/L	111	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0556	ug/L	111	(70-130)	30	0.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS2_202008060448	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0552	ug/L	110	(70-130)		
DUP_202008060368	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0552	ug/L	110	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0571	ug/L	114	(70-130)	30	3.4
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00225	ug/L	112	(50-150)		
MS2_202008060448	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0573	ug/L	115	(70-130)		
DUP_202008060368	Perfluorobutanesulfonic acid (PFBS)	0.0095		0.00948	ug/L		(0-30)	30	0.65
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0533	ug/L	120	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0546	ug/L	123	(70-130)	30	2.4
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00196	ug/L	111	(50-150)		
MS2_202008060448	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0530	ug/L	120	(70-130)		
DUP_202008060368	Perfluorodecanoic acid (PFDA)	0.0020		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0599	ug/L	120	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0597	ug/L	119	(70-130)	30	0.33
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00213	ug/L	106	(50-150)		
MS2_202008060448	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0602	ug/L	120	(70-130)		
DUP_202008060368	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0572	ug/L	114	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0552	ug/L	110	(70-130)	30	3.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00207	ug/L	104	(50-150)		
MS2_202008060448	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0577	ug/L	115	(70-130)		
DUP_202008060368	Perfluoroheptanoic acid (PFHpA)	0.0039		0.00382	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0619	ug/L	124	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0626	ug/L	125	(70-130)	30	1.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00232	ug/L	116	(50-150)		
MS2_202008060448	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0621	ug/L	124	(70-130)		
DUP_202008060368	Perfluorohexanesulfonic acid (PFHxS)	0.0066		0.00670	ug/L		(0-30)	30	1.4
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0554	ug/L	122	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0553	ug/L	121	(70-130)	30	0.18
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00201	ug/L	110	(50-150)		
MS2_202008060448	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0549	ug/L	120	(70-130)		
DUP_202008060368	Perfluorohexanoic acid (PFHxA)	0.0052		0.00531	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0598	ug/L	120	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0611	ug/L	122	(70-130)	30	2.1
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00229	ug/L	114	(50-150)		
MS2_202008060448	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0612	ug/L	122	(70-130)		
DUP_202008060368	Perfluorononanoic acid (PFNA)	0.0034		0.00354	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0584	ug/L	117	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0598	ug/L	120	(70-130)	30	2.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00220	ug/L	110	(50-150)		
MS2_202008060448	Perfluorononanoic acid (PFNA)	ND	0.05	0.0597	ug/L	119	(70-130)		
DUP_202008060368	Perfluorooctanesulfonic acid (PFOS)	0.038		0.0369	ug/L		(0-30)	30	2.4
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0551	ug/L	119	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0563	ug/L	122	(70-130)	30	2.1
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00200	ug/L	108	(50-150)		
MS2_202008060448	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0545	ug/L	117	(70-130)		
DUP_202008060368	Perfluorooctanoic acid (PFOA)	0.016		0.0158	ug/L		(0-30)	30	0.11
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0593	ug/L	119	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0607	ug/L	121	(70-130)	30	2.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00235	ug/L	117	(50-150)		
MS2_202008060448	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0614	ug/L	122	(70-130)		
DUP_202008060368	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0566	ug/L	113	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0571	ug/L	114	(70-130)	30	0.88
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00217	ug/L	109	(50-150)		
MS2_202008060448	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0584	ug/L	117	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008060368	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0592	ug/L	118	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0580	ug/L	116	(70-130)	30	2.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00216	ug/L	108	(50-150)		
MS2_202008060448	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0600	ug/L	120	(70-130)		
DUP_202008060368	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0568	ug/L	114	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0567	ug/L	113	(70-130)	30	0.18
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00215	ug/L	108	(50-150)		
MS2_202008060448	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0573	ug/L	115	(70-130)		

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1268094

Analysis Date: 08/12/2020

LCS1	Alkalinity in CaCO3 units		100	100	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	100	mg/L	100	(90-110)	20	0.0
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.03	mg/L	101	(50-150)		
MS_202008060140	Alkalinity in CaCO3 units	370	100	482	mg/L	108	(80-120)		
MS_202008060450	Alkalinity in CaCO3 units	310	100	419	mg/L	108	(80-120)		
MSD_202008060140	Alkalinity in CaCO3 units	370	100	482	mg/L	108	(80-120)	20	0.019
MSD_202008060450	Alkalinity in CaCO3 units	310	100	419	mg/L	108	(80-120)	20	0.12

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1268433

Analysis Date: 08/13/2020

LCS1	Alkalinity in CaCO3 units		100	99.6	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.8	mg/L	100	(90-110)	20	0.20
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.01	mg/L	100	(50-150)		
MS_202008060451	Alkalinity in CaCO3 units	190	100	226	mg/L	<u>37</u>	(80-120)		
MS_202008060452	Alkalinity in CaCO3 units	190	100	213	mg/L	<u>20</u>	(80-120)		
MSD_202008060451	Alkalinity in CaCO3 units	190	100	233	mg/L	<u>43</u>	(80-120)	20	3.0
MSD_202008060452	Alkalinity in CaCO3 units	190	100	216	mg/L	<u>24</u>	(80-120)	20	1.5

EPA Method 537.1 by EPA 537.1

Prep Batch: 1268005 Analytical Batch: 1268907

Analysis Date: 08/14/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0248	ug/L	105	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0242	ug/L	103	(70-130)	30	2.0

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Report: 885690  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00190	ug/L	101	(50-150)		
MS1_202008120539	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0228	ug/L	97	(70-130)		
MSD1_202008120539	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0230	ug/L	98	(70-130)	30	1
LCS1	13C2-PFDA (S)		100	88.6	%	89	(70-130)		
LCS2	13C2-PFDA (S)		100	91.2	%	91	(70-130)		
MBLK	13C2-PFDA (S)			88.5	%	88	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	86.8	%	87	(70-130)		
MS1_202008120539	13C2-PFDA (S)		100	93.7	%	94	(70-130)		
MSD1_202008120539	13C2-PFDA (S)		100	90.4	%	90	(70-130)		
LCS1	13C2-PFHxA (S)		100	98.3	%	98	(70-130)		
LCS2	13C2-PFHxA (S)		100	97.1	%	97	(70-130)		
MBLK	13C2-PFHxA (S)			96.8	%	97	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	94.8	%	95	(70-130)		
MS1_202008120539	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MSD1_202008120539	13C2-PFHxA (S)		100	98.6	%	99	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			114	%	114	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
MS1_202008120539	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
MSD1_202008120539	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	89.2	%	89	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	87.9	%	88	(70-130)		
MBLK	13C3-HFPO-DA (S)			85.9	%	86	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	88.3	%	88	(70-130)		
MS1_202008120539	13C3-HFPO-DA (S)		100	96.6	%	97	(70-130)		
MSD1_202008120539	13C3-HFPO-DA (S)		100	91.0	%	91	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	99.5	%	100	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			104	%	104	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	99.2	%	99	(50-150)		
MS1_202008120539	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MSD1_202008120539	13C4-PFOS- IS#2 (I)		100	99.5	%	99	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0270	ug/L	114	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0264	ug/L	112	(70-130)	30	2.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00211	ug/L	112	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202008120539	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0261	ug/L	111	(70-130)		
MSD1_202008120539	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0260	ug/L	110	(70-130)	30	0.46
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0263	ug/L	113	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0261	ug/L	112	(70-130)	30	0.76
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00205	ug/L	110	(50-150)		
MS1_202008120539	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0246	ug/L	106	(70-130)		
MSD1_202008120539	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0249	ug/L	107	(70-130)	30	1.2
LCS1	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	108	%	109	(50-150)		
MBLK	d3-NMeFOSAA (I)			105	%	105	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MS1_202008120539	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MSD1_202008120539	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	94.6	%	95	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	95.2	%	95	(70-130)		
MBLK	d5-NEtFOSAA (S)			94.4	%	94	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	94.6	%	95	(70-130)		
MS1_202008120539	d5-NEtFOSAA (S)		100	99.7	%	100	(70-130)		
MSD1_202008120539	d5-NEtFOSAA (S)		100	97.5	%	98	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0252	ug/L	101	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0252	ug/L	101	(70-130)	30	0.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00193	ug/L	96	(50-150)		
MS1_202008120539	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0243	ug/L	97	(70-130)		
MSD1_202008120539	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0246	ug/L	98	(70-130)	30	1.3
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0279	ug/L	112	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0279	ug/L	112	(70-130)	30	0.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	106	(50-150)		
MS1_202008120539	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0269	ug/L	107	(70-130)		
MSD1_202008120539	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0265	ug/L	106	(70-130)	30	1.4
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0280	ug/L	112	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0277	ug/L	111	(70-130)	30	1.1
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00225	ug/L	112	(50-150)		
MS1_202008120539	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0270	ug/L	108	(70-130)		
MSD1_202008120539	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0276	ug/L	110	(70-130)	30	2.4

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0247	ug/L	111	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0246	ug/L	111	(70-130)	30	0.41
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00196	ug/L	111	(50-150)		
MS1_202008120539	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0237	ug/L	107	(70-130)		
MSD1_202008120539	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0241	ug/L	109	(70-130)	30	1.5
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0263	ug/L	105	(70-130)	30	0.38
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00203	ug/L	102	(50-150)		
MS1_202008120539	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0251	ug/L	100	(70-130)		
MSD1_202008120539	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0251	ug/L	100	(70-130)	30	0.14
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0256	ug/L	102	(70-130)	30	0.78
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00192	ug/L	96	(50-150)		
MS1_202008120539	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0238	ug/L	95	(70-130)		
MSD1_202008120539	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0237	ug/L	95	(70-130)	30	0.24
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0301	ug/L	121	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0313	ug/L	125	(70-130)	30	3.9
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00238	ug/L	119	(50-150)		
MS1_202008120539	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0289	ug/L	115	(70-130)		
MSD1_202008120539	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0292	ug/L	117	(70-130)	30	1.2
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0276	ug/L	121	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0271	ug/L	119	(70-130)	30	1.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00222	ug/L	122	(50-150)		
MS1_202008120539	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0259	ug/L	114	(70-130)		
MSD1_202008120539	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0266	ug/L	117	(70-130)	30	2.6
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0284	ug/L	114	(70-130)	30	0.71
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00227	ug/L	114	(50-150)		
MS1_202008120539	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0271	ug/L	108	(70-130)		
MSD1_202008120539	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0270	ug/L	108	(70-130)	30	0.38
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0273	ug/L	109	(70-130)	30	1.8

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 885690  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00219	ug/L	110	(50-150)		
MS1_202008120539	Perfluorononanoic acid (PFNA)	ND	0.025	0.0266	ug/L	106	(70-130)		
MSD1_202008120539	Perfluorononanoic acid (PFNA)	ND	0.025	0.0262	ug/L	105	(70-130)	30	1.2
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0275	ug/L	119	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0268	ug/L	116	(70-130)	30	2.2
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00229	ug/L	124	(50-150)		
MS1_202008120539	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0256	ug/L	110	(70-130)		
MSD1_202008120539	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0258	ug/L	111	(70-130)	30	0.76
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0291	ug/L	116	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0286	ug/L	114	(70-130)	30	1.7
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00237	ug/L	119	(50-150)		
MS1_202008120539	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0286	ug/L	114	(70-130)		
MSD1_202008120539	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0276	ug/L	110	(70-130)	30	3.6
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0316	ug/L	127	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0308	ug/L	123	(70-130)	30	2.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00239	ug/L	119	(50-150)		
MS1_202008120539	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0297	ug/L	119	(70-130)		
MSD1_202008120539	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0293	ug/L	117	(70-130)	30	1.4
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0262	ug/L	105	(70-130)	30	0.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00194	ug/L	97	(50-150)		
MS1_202008120539	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0251	ug/L	101	(70-130)		
MSD1_202008120539	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0248	ug/L	99	(70-130)	30	1.4
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0257	ug/L	103	(70-130)	30	1.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00201	ug/L	100	(50-150)		
MS1_202008120539	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0245	ug/L	98	(70-130)		
MSD1_202008120539	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0243	ug/L	97	(70-130)	30	0.94

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 08/17/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 08/17/2020

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**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Total Coliform Large, E. Coli Small, E. Coli Large), MPN/100 mL (Total Coliform, E. Coli), Presence/Absence (P/A)\* (Total Coliform, E. Coli)

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 08/17/2020

Quant Report - Page 1 of 1

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## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 887122  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 887122  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **August 13, 2020 at 1157**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202008130373	GAC-1-20200813 Static ID: 537.1 @537.1	08/13/2020 0833
202008130374	GAC-2-20200813 Static ID: 537.1 @537.1	08/13/2020 0836
202008130375	GAC-3-20200813 Static ID: 537.1 @537.1	08/13/2020 0839
202008130376	GAC-4-20200813 Static ID: 537.1 @537.1	08/13/2020 0842
202008130377	IX-1-20200813 Static ID: 537.1 @537.1	08/13/2020 0845
202008130378	IX-2-20200813 Static ID: 537.1 @537.1	08/13/2020 0848
202008130379	IX-3-20200813 Static ID: 537.1 @537.1	08/13/2020 0851
202008130380	IX-4-20200813 Static ID: 537.1 @537.1	08/13/2020 0854
202008130382	LH-INF-20200813 @537.1 Chloride	08/13/2020 0857
	@ANIONS48 Sulfate	Alkalinity in CaCO3 units Total Organic Carbon
202008130383	GAC-5-20200813 @537.1	08/13/2020 1033
202008130384	GAC-6-20200813 @537.1	08/13/2020 1036

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 887122  
Project: 0250000  
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

The following samples were received from you on **August 13, 2020 at 1157**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202008130385	GAC-7-20200813	08/13/2020 1039
	@537.1	
202008130386	GAC-8-20200813	08/13/2020 1042
	@537.1	
202008130387	IX-5-20200813	08/13/2020 1045
	@537.1	
202008130388	IX-6-20200813	08/13/2020 1048
	@537.1	
202008130389	IX-7-20200813	08/13/2020 1051
	@537.1	
202008130390	IX-8-20200813	08/13/2020 1054
	@537.1	
202008130391	MB-INF-20200813	08/13/2020 1057
	@537.1	
	Chloride	@ANIONS48 Alkalinity in CaCO3 units
		Sulfate Total Organic Carbon
202008130392	MB-INF-DUP-20200813	08/13/2020 1100
	@537.1	
202008130393	FB-HOLD-20200813	08/13/2020 0900
	@537.1 FB	

#### Test Description

- @537.1 -- EPA Method 537.1
- @537.1 FB -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0





FROM: GSI Environmental Inc.  
 19200 Von Karman Ave, Suite 800  
 Irvine, CA 92612  
 (949) 679-1070

PROJECT NAME: WRD Pilot

PROJECT CONTACT: Miae Jeon

GLOBAL ID:

PROJECT NO.: 5302

LAB CONTACT: Sophia Liang

SAMPLER(S): (PRINT) RDT

TEL: (949) 679-1070 E-MAIL: mjeon@gssi-net.com

LABORATORY: Eurofins Eaton Analytical

TURNAROUND TIME:  
 SAME DAY  24 HR  48 HR  
 72 HR  5 DAYS  STANDARD

SPECIAL INSTRUCTIONS:  
 Send report copies to pegalvin@gssi-net.com, mjeon@gssi-net.com,  
 & rdlorres@gssi-net.com;  
 Provide EDD of sample results

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION			PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO <sub>3</sub> ), Chloride (EPA 300.0)	Alkalinity (as CaCO <sub>3</sub> , SM 2320B)	TOC (SM 5310C)	Field Filtered
		DATE	TIME			Unpreserved	Preserved						
	IX-5-20200813	8-13	1045	Water	2		2		X				
	IX-6-20200813		1048	Water	2		2		X				
	IX-7-20200813		1051	Water	2		2		X				
	IX-8-20200813		1054	Water	2		2		X				
	MB-INF-20200813		1057	Water	5		2	3	X	X	X		
	MB-INF-DUP-20200813		1100	Water	2		2		X				
	FB-20200813		0900	Water	1		1		X				

REINQUISHED BY: (Signature) [Signature] Date: 8-13-2020 Time: 1157

REINQUISHED BY: (Signature) [Signature] Date: \_\_\_\_\_ Time: \_\_\_\_\_

REINQUISHED BY: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_



Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Report:** 887122  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

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**Folder Comments**

8/21:537.1 -0374:IS (13C-PFOA) area count compared to most recent continuing calibration standard, 155.7% failed high. Method limit is 70-140%. Sample was used as batch duplicate and duplicate had similar result confirming matrix interference. Flagged affected analytes E6.All other batch QC, LCS, MRL Check, MS, and MBLK passed method requirements.Result not valid for compliance.

**Flags Legend:**

E6 - Concentration estimated. Internal standard recoveries did not meet method acceptance criteria.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202008130378 IX-2-20200813</b>				
08/20/2020 17:39	Perfluorohexanoic acid (PFHxA)		0.0024		ug/L	0.0020
		<b>202008130379 IX-3-20200813</b>				
08/20/2020 17:49	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
		<b>202008130380 IX-4-20200813</b>				
08/20/2020 17:59	Perfluorohexanoic acid (PFHxA)		0.0022		ug/L	0.0020
		<b>202008130382 LH-INF-20200813</b>				
08/20/2020 14:39	Alkalinity in CaCO3 units		200		mg/L	2.0
08/13/2020 21:15	Chloride		110	250	mg/L	2.5
08/13/2020 21:15	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
08/13/2020 21:15	Nitrate as NO3 (calc)		12	45	mg/L	2.2
08/20/2020 18:08	Perfluorobutanesulfonic acid (PFBS)		0.0062		ug/L	0.0020
08/20/2020 18:08	Perfluorohexanesulfonic acid (PFHxS)		0.0061		ug/L	0.0020
08/20/2020 18:08	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
08/20/2020 18:08	Perfluorononanoic acid (PFNA)		0.0033		ug/L	0.0020
08/20/2020 18:08	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
08/20/2020 18:08	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
08/13/2020 21:15	Sulfate		180	250	mg/L	2.5
08/13/2020 21:15	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
08/19/2020 15:02	Total Organic Carbon		0.76		mg/L	0.30
		<b>202008130387 IX-5-20200813</b>				
08/17/2020 23:52	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
		<b>202008130388 IX-6-20200813</b>				
08/18/2020 00:02	Perfluorohexanoic acid (PFHxA)		0.0039		ug/L	0.0020
		<b>202008130389 IX-7-20200813</b>				
08/18/2020 00:11	Perfluorohexanoic acid (PFHxA)		0.0050		ug/L	0.0020
		<b>202008130390 IX-8-20200813</b>				
08/18/2020 00:32	Perfluorohexanoic acid (PFHxA)		0.0044		ug/L	0.0020
		<b>202008130391 MB-INF-20200813</b>				
08/25/2020 19:13	Alkalinity in CaCO3 units		170		mg/L	2.0
08/13/2020 20:36	Chloride		51	250	mg/L	2.5
08/13/2020 20:36	Nitrate as Nitrogen by IC		2.5	10	mg/L	0.50
08/13/2020 20:36	Nitrate as NO3 (calc)		11	45	mg/L	2.2
08/20/2020 18:46	Perfluorobutanesulfonic acid (PFBS)		0.0088		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
08/20/2020 18:46	Perfluoroheptanoic acid (PFHpA)		0.0035		ug/L	0.0020
08/20/2020 18:46	Perfluorohexanesulfonic acid (PFHxS)		0.0061		ug/L	0.0020
08/20/2020 18:46	Perfluorohexanoic acid (PFHxA)		0.0051		ug/L	0.0020
08/20/2020 18:46	Perfluorononanoic acid (PFNA)		0.0038		ug/L	0.0020
08/20/2020 18:46	Perfluorooctanesulfonic acid (PFOS)		0.034		ug/L	0.0020
08/20/2020 18:46	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
08/13/2020 20:36	Sulfate		79	250	mg/L	2.5
08/13/2020 20:36	Total Nitrate, Nitrite-N, CALC		2.5		mg/L	0.10
08/19/2020 15:24	Total Organic Carbon		0.86		mg/L	0.30
	<b>202008130392</b>	<b><u>MB-INF-DUP-20200813</u></b>				
08/20/2020 18:56	Perfluorobutanesulfonic acid (PFBS)		0.0089		ug/L	0.0020
08/20/2020 18:56	Perfluoroheptanoic acid (PFHpA)		0.0035		ug/L	0.0020
08/20/2020 18:56	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
08/20/2020 18:56	Perfluorohexanoic acid (PFHxA)		0.0046		ug/L	0.0020
08/20/2020 18:56	Perfluorononanoic acid (PFNA)		0.0039		ug/L	0.0020
08/20/2020 18:56	Perfluorooctanesulfonic acid (PFOS)		0.034		ug/L	0.0020
08/20/2020 18:56	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20200813 (202008130373)</b>					<b>Sampled on 08/13/2020 0833</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	13C2-PFDA	109	%		1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	13C2-PFHxA	110	%		1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	102	%		1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	96	%		1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	118	%		1

<b>GAC-2-20200813 (202008130374)</b>					<b>Sampled on 08/13/2020 0836</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND (E6)	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND (E6)	ug/L	0.0050	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	13C2-PFDA	86	%		1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	13C2-PFHxA	95	%		1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	148	%		1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	84	%		1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	95	%		1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	116	%		1

**GAC-3-20200813 (202008130375)**

**Sampled on 08/13/2020 0839**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	13C2-PFDA	110	%		1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	13C2-PFHxA	110	%		1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	103	%		1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	97	%		1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	116	%		1

**GAC-4-20200813 (202008130376)**

Sampled on 08/13/2020 0842

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	13C2-PFDA	105	%		1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	13C2-PFHxA	107	%		1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	129	%		1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	97	%		1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	99	%		1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	118	%		1

**IX-1-20200813 (202008130377)**

Static ID: 537.1

Sampled on 08/13/2020 0845

**EPA 537.1 - EPA Method 537.1**

08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	13C2-PFDA	112	%		1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	13C2-PFHxA	116	%		1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	104	%		1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	98	%		1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	116	%		1

**IX-2-20200813 (202008130378)**

**Sampled on 08/13/2020 0848**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	13C2-PFDA	109	%		1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	13C2-PFHxA	111	%		1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	127	%		1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	102	%		1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	98	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	113	%		1
<b>IX-3-20200813 (202008130379)</b>						<b>Sampled on 08/13/2020 0851</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	13C2-PFDA	96	%		1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	13C2-PFHxA	102	%		1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	137	%		1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	92	%		1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	99	%		1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	111	%		1

<b>IX-4-20200813 (202008130380)</b>						<b>Sampled on 08/13/2020 0854</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0022	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	13C2-PFDA	106	%		1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	13C2-PFHxA	110	%		1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	128	%		1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	101	%		1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	100	%		1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	114	%		1

**LH-INF-20200813 (202008130382)**

**Sampled on 08/13/2020 0857**

**SM 5310C - Total Organic Carbon**

08/19/20 15:02	1269186	(SM 5310C)	Total Organic Carbon	0.76	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

08/13/20 21:15	1268263	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
08/13/20 21:15	1268263	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
08/13/20 21:15	1268263	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
08/13/20 21:15	1268263	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

08/13/20 21:15	1268298	(EPA 300.0)	Chloride	110	mg/L	2.5	5
08/13/20 21:15	1268298	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

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 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0062	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0061	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0033	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	13C2-PFDA	111	%		1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	13C2-PFHxA	112	%		1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	128	%		1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	97	%		1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	102	%		1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	111	%		1

**SM 2320B - Alkalinity in CaCO3 units**

08/20/20 14:39	1269807	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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**GAC-5-20200813 (202008130383)**

**Sampled on 08/13/2020 1033**

**EPA 537.1 - EPA Method 537.1**

08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	13C2-PFDA	100	%		1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	13C2-PFHxA	103	%		1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	136	%		1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	91	%		1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	110	%		1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	102	%		1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	116	%		1

**GAC-6-20200813 (202008130384)**

**Sampled on 08/13/2020 1036**

**EPA 537.1 - EPA Method 537.1**

08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

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Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	13C2-PFDA	103	%		1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	13C2-PFHxA	103	%		1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	134	%		1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	92	%		1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	99	%		1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	112	%		1

**GAC-7-20200813 (202008130385)**

Sampled on 08/13/2020 1039

**EPA 537.1 - EPA Method 537.1**

08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	13C2-PFDA	89	%		1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	13C2-PFHxA	91	%		1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	145	%		1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	81	%		1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	98	%		1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	109	%		1

**GAC-8-20200813 (202008130386)**

Sampled on 08/13/2020 1042

**EPA 537.1 - EPA Method 537.1**

08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	13C2-PFDA	107	%		1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	13C2-PFHxA	107	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	13C3-HFPO-DA	104	%		1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	d3-NMeFOSAA	102	%		1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	d5-NEtFOSAA	107	%		1

**IX-5-20200813 (202008130387)**

**Sampled on 08/13/2020 1045**

**EPA 537.1 - EPA Method 537.1**

08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	13C2-PFDA	118	%		1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	13C2-PFHxA	112	%		1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	13C3-HFPO-DA	113	%		1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	d3-NMeFOSAA	101	%		1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	d5-NEtFOSAA	113	%		1

**IX-6-20200813 (202008130388)**

**Sampled on 08/13/2020 1048**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 537.1 - EPA Method 537.1</b>									
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	13C2-PFDA	117	%		1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	13C2-PFHxA	112	%		1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	13C3-HFPO-DA	114	%		1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	d3-NMeFOSAA	100	%		1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	d5-NEtFOSAA	114	%		1

**IX-7-20200813 (202008130389)**

**Sampled on 08/13/2020 1051**

<b>EPA 537.1 - EPA Method 537.1</b>									
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0050	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	13C2-PFDA	123	%		1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	13C2-PFHxA	118	%		1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	13C3-HFPO-DA	121	%		1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	d3-NMeFOSAA	101	%		1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	d5-NEtFOSAA	115	%		1

**IX-8-20200813 (202008130390)**

**Sampled on 08/13/2020 1054**

**EPA 537.1 - EPA Method 537.1**

08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0044	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	13C2-PFDA	116	%		1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	13C2-PFHxA	113	%		1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	13C3-HFPO-DA	114	%		1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	d3-NMeFOSAA	98	%		1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	d5-NEtFOSAA	115	%		1

**MB-INF-20200813 (202008130391)**

Sampled on 08/13/2020 1057

**SM 5310C - Total Organic Carbon**

08/19/20 15:24	1269186	(SM 5310C)	Total Organic Carbon	0.86	mg/L	0.30	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

08/13/20 20:36	1268263	(EPA 300.0)	Nitrate as Nitrogen by IC	2.5	mg/L	0.50	5
08/13/20 20:36	1268263	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
08/13/20 20:36	1268263	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
08/13/20 20:36	1268263	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.5	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

08/13/20 20:36	1268298	(EPA 300.0)	Chloride	51	mg/L	2.5	5
08/13/20 20:36	1268298	(EPA 300.0)	Sulfate	79	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

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 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0088	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0035	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0061	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0051	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0038	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.034	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	13C2-PFDA	112	%		1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	13C2-PFHxA	109	%		1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	126	%		1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	95	%		1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	115	%		1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	109	%		1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	109	%		1

**SM 2320B - Alkalinity in CaCO3 units**

08/25/20 19:13	1270621	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
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**MB-INF-DUP-20200813 (202008130392)**

Sampled on 08/13/2020 1100

**EPA 537.1 - EPA Method 537.1**

08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0089	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0035	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0039	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.034	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	13C2-PFDA	115	%		1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	13C2-PFHxA	108	%		1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	95	%		1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	114	%		1

**FB-HOLD-20200813 (202008130393)**

Sampled on 08/13/2020 0900

**EPA 537.1 - EPA Method 537.1**

08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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**Report:** 887122  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	13C2-PFDA	104	%		1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	13C2-PFHxA	106	%		1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	13C3-HFPO-DA	101	%		1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	d3-NMeFOSAA	100	%		1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	d5-NEtFOSAA	111	%		1

Rounding on totals after summation.  
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**Report:** 887122  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1268263**

202008130382 LH-INF-20200813  
 202008130391 MB-INF-20200813

**Analysis Date: 08/13/2020**

Analyzed by: B9PD  
 Analyzed by: B9PD

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1268298**

202008130382 LH-INF-20200813  
 202008130391 MB-INF-20200813

**Analysis Date: 08/13/2020**

Analyzed by: B9PD  
 Analyzed by: B9PD

**EPA Method 537.1**

**Prep Batch: 1269395 Analytical Batch: 1268915**

202008130373 GAC-1-20200813  
 202008130374 GAC-2-20200813  
 202008130375 GAC-3-20200813  
 202008130376 GAC-4-20200813  
 202008130377 IX-1-20200813  
 202008130378 IX-2-20200813  
 202008130379 IX-3-20200813  
 202008130380 IX-4-20200813  
 202008130382 LH-INF-20200813  
 202008130383 GAC-5-20200813  
 202008130384 GAC-6-20200813  
 202008130385 GAC-7-20200813  
 202008130391 MB-INF-20200813  
 202008130392 MB-INF-DUP-20200813

**Analysis Date: 08/20/2020**

Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
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 Analyzed by: Y7BM

**EPA Method 537.1**

**Prep Batch: 1268514 Analytical Batch: 1268993**

202008130386 GAC-8-20200813  
 202008130387 IX-5-20200813  
 202008130388 IX-6-20200813  
 202008130389 IX-7-20200813  
 202008130390 IX-8-20200813

**Analysis Date: 08/17/2020**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM

**Total Organic Carbon**

**Analytical Batch: 1269186**

202008130382 LH-INF-20200813  
 202008130391 MB-INF-20200813

**Analysis Date: 08/19/2020**

Analyzed by: ZB2Z  
 Analyzed by: ZB2Z

**Alkalinity in CaCO3 units**

**Analytical Batch: 1269807**

202008130382 LH-INF-20200813

**Analysis Date: 08/20/2020**

Analyzed by: ZS6I

**EPA Method 537.1**

**Prep Batch: 1268848 Analytical Batch: 1269962**

202008130393 FB-HOLD-20200813

**Analysis Date: 08/20/2020**

Analyzed by: KAM



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**Report:** 887122  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

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**Alkalinity in CaCO<sub>3</sub> units****Analytical Batch: 1270621**

202008130391

MB-INF-20200813

**Analysis Date: 08/25/2020**

Analyzed by: ZS6I

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 1 800 566 LABS (1 800 566 5227)

Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1268263</b>					<b>Analysis Date: 08/13/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.60	mg/L	104	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.60	mg/L	104	(90-110)	20	0.38
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0482	mg/L	96	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0172	mg/L	138	(50-150)		
MS_202008130294	Nitrate as Nitrogen by IC	2.4	6.5	9.31	mg/L	110	(80-120)		
MS_202008130391	Nitrate as Nitrogen by IC	2.5	6.5	9.40	mg/L	110	(80-120)		
MSD_202008130294	Nitrate as Nitrogen by IC	2.4	6.5	9.22	mg/L	109	(80-120)	20	0.94
MSD_202008130391	Nitrate as Nitrogen by IC	2.5	6.5	9.32	mg/L	109	(80-120)	20	0.81
LCS1	Nitrite Nitrogen by IC		1	1.04	mg/L	104	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.04	mg/L	104	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0527	mg/L	105	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0133	mg/L	106	(50-150)		
MS_202008130294	Nitrite Nitrogen by IC	ND	2.5	2.53	mg/L	101	(80-120)		
MS_202008130391	Nitrite Nitrogen by IC	ND	2.5	2.67	mg/L	107	(80-120)		
MSD_202008130294	Nitrite Nitrogen by IC	ND	2.5	2.48	mg/L	99	(80-120)	20	1.9
MSD_202008130391	Nitrite Nitrogen by IC	ND	2.5	2.65	mg/L	106	(80-120)	20	0.76
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1268298</b>					<b>Analysis Date: 08/13/2020</b>				
LCS1	Chloride		25	27.0	mg/L	108	(90-110)		
LCS2	Chloride		25	27.0	mg/L	108	(90-110)	20	0.37
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.458	mg/L	92	(50-150)		
MS_202008130294	Chloride	190	62.5	ND	mg/L				
MS_202008130391	Chloride	51	65	125	mg/L	119	(80-120)		
MSD_202008130294	Chloride	190	62.5	ND	mg/L				
MSD_202008130391	Chloride	51	65	124	mg/L	117	(80-120)	20	0.78
LCS1	Sulfate		50	53.3	mg/L	107	(90-110)		
LCS2	Sulfate		50	53.3	mg/L	107	(90-110)	20	0.0
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	1.02	mg/L	102	(50-150)		
MRL_W	Sulfate		0.25	0.270	mg/L	108	(50-150)		
MS_202008130294	Sulfate	230	125	367	mg/L	113	(80-120)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202008130391	Sulfate	79	125	222	mg/L	114	(80-120)		
MSD_202008130294	Sulfate	230	125	365	mg/L	111	(80-120)	20	0.66
MSD_202008130391	Sulfate	79	125	220	mg/L	113	(80-120)	20	0.72

EPA Method 537.1 by EPA 537.1

Prep Batch: 1269395 Analytical Batch: 1268915

Analysis Date: 08/20/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008130374	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0413	ug/L	88	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0431	ug/L	92	(70-130)	30	4.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00160	ug/L	85	(50-150)		
MS_202008130373	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00168	ug/L	89	(50-150)		
DUP_202008130374	13C2-PFDA (S)			95.3	%	95	(70-130)		
LCS3	13C2-PFDA (S)		100	119	%	119	(70-130)		
LCS4	13C2-PFDA (S)		100	118	%	119	(70-130)		
MBLK	13C2-PFDA (S)			121	%	121	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	115	%	115	(70-130)		
MS_202008130373	13C2-PFDA (S)		100	113	%	113	(70-130)		
DUP_202008130374	13C2-PFHxA (S)			99.5	%	100	(70-130)		
LCS3	13C2-PFHxA (S)		100	123	%	123	(70-130)		
LCS4	13C2-PFHxA (S)		100	126	%	126	(70-130)		
MBLK	13C2-PFHxA (S)			124	%	124	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	120	%	120	(70-130)		
MS_202008130373	13C2-PFHxA (S)		100	117	%	117	(70-130)		
DUP_202008130374	13C2-PFOA- IS#1 (I)			138	%	138	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.3	%	98	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			106	%	106	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	98.7	%	99	(50-150)		
MS_202008130373	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
DUP_202008130374	13C3-HFPO-DA (S)			90.2	%	90	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	114	%	114	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	118	%	119	(70-130)		
MBLK	13C3-HFPO-DA (S)			112	%	112	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	116	%	116	(70-130)		
MS_202008130373	13C3-HFPO-DA (S)		100	106	%	107	(70-130)		
DUP_202008130374	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	98.4	%	98	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	13C4-PFOS- IS#2 (I)		100	98.9	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			96.1	%	96	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.4	%	98	(50-150)		
MS_202008130373	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
DUP_202008130374	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0474	ug/L	98	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0490	ug/L	101	(70-130)	30	3.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00205	ug/L	108	(50-150)		
MS_202008130373	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00203	ug/L	107	(50-150)		
DUP_202008130374	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0456	ug/L	98	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0474	ug/L	102	(70-130)	30	3.9
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00189	ug/L	101	(50-150)		
MS_202008130373	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00192	ug/L	103	(50-150)		
DUP_202008130374	d3-NMeFOSAA (I)			97.3	%	97	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	86.0	%	86	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	91.4	%	91	(50-150)		
MBLK	d3-NMeFOSAA (I)			85.5	%	85	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	82.8	%	83	(50-150)		
MS_202008130373	d3-NMeFOSAA (I)		100	94.6	%	95	(50-150)		
DUP_202008130374	d5-NEtFOSAA (S)			116	%	116	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	113	%	113	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	117	%	117	(70-130)		
MBLK	d5-NEtFOSAA (S)			124	%	125	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	118	%	118	(70-130)		
MS_202008130373	d5-NEtFOSAA (S)		100	115	%	115	(70-130)		
DUP_202008130374	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0498	ug/L	100	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0494	ug/L	99	(70-130)	30	0.81
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00209	ug/L	104	(50-150)		
MS_202008130373	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00198	ug/L	98	(50-150)		
DUP_202008130374	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0490	ug/L	98	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0502	ug/L	100	(70-130)	30	2.4
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00207	ug/L	103	(50-150)		
MS_202008130373	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00207	ug/L	104	(50-150)		
DUP_202008130374	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0482	ug/L	96	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0503	ug/L	101	(70-130)	30	4.3
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00213	ug/L	106	(50-150)		
MS_202008130373	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00203	ug/L	100	(50-150)		
DUP_202008130374	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0429	ug/L	97	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0458	ug/L	103	(70-130)	30	6.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00184	ug/L	104	(50-150)		
MS_202008130373	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00182	ug/L	103	(50-150)		
DUP_202008130374	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0484	ug/L	97	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0500	ug/L	100	(70-130)	30	3.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202008130373	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00202	ug/L	100	(50-150)		
DUP_202008130374	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0489	ug/L	98	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0483	ug/L	97	(70-130)	30	1.2
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00195	ug/L	98	(50-150)		
MS_202008130373	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00184	ug/L	91	(50-150)		
DUP_202008130374	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0518	ug/L	104	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0527	ug/L	105	(70-130)	30	1.7
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00215	ug/L	108	(50-150)		
MS_202008130373	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00222	ug/L	110	(50-150)		
DUP_202008130374	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0447	ug/L	98	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0469	ug/L	103	(70-130)	30	4.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00191	ug/L	105	(50-150)		
MS_202008130373	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00199	ug/L	109	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 887122  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008130374	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0501	ug/L	100	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0519	ug/L	104	(70-130)	30	3.5
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202008130373	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00216	ug/L	105	(50-150)		
DUP_202008130374	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0502	ug/L	100	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0512	ug/L	102	(70-130)	30	2.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00215	ug/L	108	(50-150)		
MS_202008130373	Perfluorononanoic acid (PFNA)	ND	0.002	0.00218	ug/L	109	(50-150)		
DUP_202008130374	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0453	ug/L	98	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0474	ug/L	102	(70-130)	30	4.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00200	ug/L	108	(50-150)		
MS_202008130373	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00207	ug/L	98	(50-150)		
DUP_202008130374	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0507	ug/L	101	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0522	ug/L	104	(70-130)	30	2.9
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202008130373	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00226	ug/L	107	(50-150)		
DUP_202008130374	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0520	ug/L	104	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0536	ug/L	107	(70-130)	30	3.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00201	ug/L	100	(50-150)		
MS_202008130373	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00223	ug/L	110	(50-150)		
DUP_202008130374	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0476	ug/L	95	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0482	ug/L	96	(70-130)	30	1.3
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00184	ug/L	92	(50-150)		
MS_202008130373	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00182	ug/L	91	(50-150)		
DUP_202008130374	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0485	ug/L	97	(70-130)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0490	ug/L	98	(70-130)	30	1.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00199	ug/L	99	(50-150)		
MS_202008130373	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00198	ug/L	99	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1268514 Analytical Batch: 1268993

Analysis Date: 08/17/2020

DUP_202008130757	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0240	ug/L	102	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0268	ug/L	114	(70-130)	30	11
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00204	ug/L	108	(50-150)		
MS_202008130755	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00198	ug/L	105	(50-150)		
DUP_202008130757	13C2-PFDA (S)			114	%	114	(70-130)		
LCS1	13C2-PFDA (S)		100	110	%	110	(70-130)		
LCS2	13C2-PFDA (S)		100	113	%	113	(70-130)		
MBLK	13C2-PFDA (S)			113	%	113	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	112	%	112	(70-130)		
MS_202008130755	13C2-PFDA (S)		100	114	%	114	(70-130)		
DUP_202008130757	13C2-PFHxA (S)			111	%	111	(70-130)		
LCS1	13C2-PFHxA (S)		100	106	%	106	(70-130)		
LCS2	13C2-PFHxA (S)		100	111	%	111	(70-130)		
MBLK	13C2-PFHxA (S)			109	%	109	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	109	%	109	(70-130)		
MS_202008130755	13C2-PFHxA (S)		100	113	%	113	(70-130)		
DUP_202008130757	13C2-PFOA- IS#1 (I)			97.8	%	98	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	97.7	%	98	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	96.7	%	97	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			97.7	%	98	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MS_202008130755	13C2-PFOA- IS#1 (I)		100	95.7	%	96	(50-150)		
DUP_202008130757	13C3-HFPO-DA (S)			111	%	111	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	112	%	112	(70-130)		
MBLK	13C3-HFPO-DA (S)			106	%	106	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
MS_202008130755	13C3-HFPO-DA (S)		100	111	%	111	(70-130)		
DUP_202008130757	13C4-PFOS- IS#2 (I)			98.5	%	98	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	13C4-PFOS- IS#2 (I)		100	97.8	%	98	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	95.1	%	95	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			96.9	%	97	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
MS_202008130755	13C4-PFOS- IS#2 (I)		100	96.2	%	96	(50-150)		
DUP_202008130757	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0238	ug/L	101	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0273	ug/L	116	(70-130)	30	14
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00212	ug/L	112	(50-150)		
MS_202008130755	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00205	ug/L	108	(50-150)		
DUP_202008130757	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0236	ug/L	101	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0264	ug/L	113	(70-130)	30	11
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00204	ug/L	110	(50-150)		
MS_202008130755	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00194	ug/L	104	(50-150)		
DUP_202008130757	d3-NMeFOSAA (I)			101	%	101	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	98.0	%	98	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			100	%	100	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MS_202008130755	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
DUP_202008130757	d5-NEtFOSAA (S)			107	%	107	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
MBLK	d5-NEtFOSAA (S)			106	%	106	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
MS_202008130755	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
DUP_202008130757	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0242	ug/L	97	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0273	ug/L	109	(70-130)	30	12
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00213	ug/L	107	(50-150)		
MS_202008130755	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00210	ug/L	105	(50-150)		
DUP_202008130757	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0246	ug/L	98	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0275	ug/L	110	(70-130)	30	11

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00224	ug/L	112	(50-150)		
MS_202008130755	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00208	ug/L	104	(50-150)		
DUP_202008130757	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0249	ug/L	100	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0267	ug/L	107	(70-130)	30	7.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00219	ug/L	109	(50-150)		
MS_202008130755	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00206	ug/L	103	(50-150)		
DUP_202008130757	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0209	ug/L	95	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0233	ug/L	105	(70-130)	30	11
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00190	ug/L	108	(50-150)		
MS_202008130755	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00187	ug/L	106	(50-150)		
DUP_202008130757	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0251	ug/L	100	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0292	ug/L	117	(70-130)	30	15
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202008130755	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00223	ug/L	112	(50-150)		
DUP_202008130757	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0289	ug/L	116	(70-130)	30	15
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00229	ug/L	115	(50-150)		
MS_202008130755	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00214	ug/L	107	(50-150)		
DUP_202008130757	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0294	ug/L	118	(70-130)	30	12
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00238	ug/L	119	(50-150)		
MS_202008130755	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00228	ug/L	113	(50-150)		
DUP_202008130757	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0230	ug/L	101	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0260	ug/L	114	(70-130)	30	12
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00207	ug/L	113	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 887122  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202008130755	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00201	ug/L	110	(50-150)		
DUP_202008130757	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0277	ug/L	111	(70-130)	30	10
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202008130755	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00224	ug/L	109	(50-150)		
DUP_202008130757	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0256	ug/L	102	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0288	ug/L	115	(70-130)	30	12
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00250	ug/L	125	(50-150)		
MS_202008130755	Perfluorononanoic acid (PFNA)	ND	0.002	0.00222	ug/L	111	(50-150)		
DUP_202008130757	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0236	ug/L	102	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0262	ug/L	113	(70-130)	30	10
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00228	ug/L	123	(50-150)		
MS_202008130755	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00199	ug/L	104	(50-150)		
DUP_202008130757	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0294	ug/L	118	(70-130)	30	13
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00262	ug/L	131	(50-150)		
MS_202008130755	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00230	ug/L	111	(50-150)		
DUP_202008130757	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0287	ug/L	115	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0320	ug/L	128	(70-130)	30	11
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00283	ug/L	142	(50-150)		
MS_202008130755	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00256	ug/L	116	(50-150)		
DUP_202008130757	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0299	ug/L	120	(70-130)	30	11
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00245	ug/L	122	(50-150)		
MS_202008130755	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00228	ug/L	114	(50-150)		
DUP_202008130757	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0261	ug/L	104	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0295	ug/L	118	(70-130)	30	12
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202008130755	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00220	ug/L	110	(50-150)		

**Total Organic Carbon by SM 5310C**

Analytical Batch: 1269186

Analysis Date: 08/19/2020

LCS1	Total Organic Carbon		5	5.46	mg/L	109	(90-110)		
LCS2	Total Organic Carbon		5	5.48	mg/L	110	(90-110)	20	0.55
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.255	mg/L	127	(50-150)		
MS_202008130594	Total Organic Carbon	3.7	4	8.22	mg/L	114	(80-120)		
MS2_202008130391	Total Organic Carbon	0.86	2	3.10	mg/L	112	(80-120)		
MSD_202008130594	Total Organic Carbon	3.7	4	8.20	mg/L	113	(80-120)	20	0.24
MSD2_202008130391	Total Organic Carbon	0.86	2	3.09	mg/L	111	(80-120)	20	0.32

**Alkalinity in CaCO3 units by SM 2320B**

Analytical Batch: 1269807

Analysis Date: 08/20/2020

LCS1	Alkalinity in CaCO3 units		100	102	mg/L	102	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.7	mg/L	100	(90-110)	20	2.3
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.03	mg/L	101	(50-150)		
MS_202008140499	Alkalinity in CaCO3 units	120	100	151	mg/L	<u>29</u>	(80-120)		
MS_202008180129	Alkalinity in CaCO3 units	70	100	170	mg/L	100	(80-120)		
MSD_202008140499	Alkalinity in CaCO3 units	120	100	147	mg/L	<u>26</u>	(80-120)	20	2.7
MSD_202008180129	Alkalinity in CaCO3 units	70	100	169	mg/L	99	(80-120)	20	0.40

**EPA Method 537.1 by EPA 537.1**

Prep Batch: 1268848 Analytical Batch: 1269962

Analysis Date: 08/20/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0250	ug/L	106	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0236	ug/L	100	(70-130)	30	5.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00195	ug/L	104	(50-150)		
MS_202007210460	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00192	ug/L	102	(50-150)		
MSD_202007210460	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00190	ug/L	101	(50-150)	50	0.32
LCS1	13C2-PFDA (S)		100	104	%	104	(70-130)		
LCS2	13C2-PFDA (S)		100	106	%	106	(70-130)		
MBLK	13C2-PFDA (S)			107	%	107	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 887122  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C2-PFDA (S)		100	101	%	101	(70-130)		
MS_202007210460	13C2-PFDA (S)		100	107	%	107	(70-130)		
MSD_202007210460	13C2-PFDA (S)		100	103	%	103	(70-130)		
LCS1	13C2-PFHxA (S)		100	112	%	112	(70-130)		
LCS2	13C2-PFHxA (S)		100	109	%	109	(70-130)		
MBLK	13C2-PFHxA (S)			111	%	111	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	108	%	108	(70-130)		
MS_202007210460	13C2-PFHxA (S)		100	114	%	114	(70-130)		
MSD_202007210460	13C2-PFHxA (S)		100	111	%	111	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	98.4	%	98	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	99.4	%	99	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			98.3	%	98	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MS_202007210460	13C2-PFOA- IS#1 (I)		100	95.3	%	95	(50-150)		
MSD_202007210460	13C2-PFOA- IS#1 (I)		100	97.0	%	97	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	110	%	110	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
MBLK	13C3-HFPO-DA (S)			107	%	107	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MS_202007210460	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
MSD_202007210460	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	97.1	%	97	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	99.2	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			98.6	%	99	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	96.9	%	97	(50-150)		
MS_202007210460	13C4-PFOS- IS#2 (I)		100	97.6	%	98	(50-150)		
MSD_202007210460	13C4-PFOS- IS#2 (I)		100	97.0	%	97	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0254	ug/L	107	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0249	ug/L	106	(70-130)	30	2.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00206	ug/L	109	(50-150)		
MS_202007210460	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00209	ug/L	111	(50-150)		
MSD_202007210460	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00227	ug/L	120	(50-150)	50	8.2
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0237	ug/L	102	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0228	ug/L	98	(70-130)	30	3.9
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00190	ug/L	102	(50-150)		
MS_202007210460	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00186	ug/L	100	(50-150)		

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 887122  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202007210460	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00174	ug/L	94	(50-150)	50	5.8
LCS1	d3-NMeFOSAA (I)		100	96.2	%	96	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	95.4	%	95	(50-150)		
MBLK	d3-NMeFOSAA (I)			96.9	%	97	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	95.5	%	95	(50-150)		
MS_202007210460	d3-NMeFOSAA (I)		100	96.4	%	96	(50-150)		
MSD_202007210460	d3-NMeFOSAA (I)		100	96.1	%	96	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
MBLK	d5-NEtFOSAA (S)			104	%	105	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	106	%	107	(70-130)		
MS_202007210460	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MSD_202007210460	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0253	ug/L	101	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0243	ug/L	97	(70-130)	30	4.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00197	ug/L	99	(50-150)		
MS_202007210460	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00202	ug/L	101	(50-150)		
MSD_202007210460	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00213	ug/L	107	(50-150)	50	5.1
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0258	ug/L	103	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0256	ug/L	102	(70-130)	30	0.78
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00214	ug/L	107	(50-150)		
MS_202007210460	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00197	ug/L	98	(50-150)		
MSD_202007210460	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00202	ug/L	101	(50-150)	50	2.7
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0258	ug/L	103	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0258	ug/L	103	(70-130)	30	0.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00202	ug/L	101	(50-150)		
MS_202007210460	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00203	ug/L	101	(50-150)		
MSD_202007210460	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00207	ug/L	104	(50-150)	50	2.0
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0240	ug/L	108	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0234	ug/L	106	(70-130)	30	2.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00191	ug/L	108	(50-150)		
MS_202007210460	Perfluorobutanesulfonic acid (PFBS)	0.0020	0.0018	0.00390	ug/L	105	(50-150)		
MSD_202007210460	Perfluorobutanesulfonic acid (PFBS)	0.0020	0.0018	0.00395	ug/L	108	(50-150)	50	1.4
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0252	ug/L	101	(70-130)		

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 887122  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0242	ug/L	97	(70-130)	30	4.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00192	ug/L	96	(50-150)		
MS_202007210460	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00206	ug/L	103	(50-150)		
MSD_202007210460	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00192	ug/L	96	(50-150)	50	7.0
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0255	ug/L	102	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0238	ug/L	95	(70-130)	30	6.9
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00188	ug/L	94	(50-150)		
MS_202007210460	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00196	ug/L	98	(50-150)		
MSD_202007210460	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00190	ug/L	95	(50-150)	50	2.7
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0265	ug/L	106	(70-130)	30	2.6
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202007210460	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00308	ug/L	118	(50-150)		
MSD_202007210460	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00293	ug/L	110	(50-150)	50	5.2
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0243	ug/L	107	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0237	ug/L	104	(70-130)	30	2.5
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00197	ug/L	108	(50-150)		
MS_202007210460	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00210	ug/L	105	(50-150)		
MSD_202007210460	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00213	ug/L	107	(50-150)	50	1.6
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0259	ug/L	104	(70-130)	30	4.2
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00219	ug/L	110	(50-150)		
MS_202007210460	Perfluorohexanoic acid (PFHxA)	0.0048	0.002	0.00684	ug/L	103	(50-150)		
MSD_202007210460	Perfluorohexanoic acid (PFHxA)	0.0048	0.002	0.00671	ug/L	96	(50-150)	50	1.9
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0263	ug/L	105	(70-130)	30	0.38
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202007210460	Perfluorononanoic acid (PFNA)	ND	0.002	0.00218	ug/L	109	(50-150)		
MSD_202007210460	Perfluorononanoic acid (PFNA)	ND	0.002	0.00207	ug/L	104	(50-150)	50	5.1
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0244	ug/L	106	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0234	ug/L	101	(70-130)	30	4.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00192	ug/L	104	(50-150)		
MS_202007210460	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00199	ug/L	103	(50-150)		
MSD_202007210460	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00196	ug/L	101	(50-150)	50	1.6
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0256	ug/L	102	(70-130)	30	2.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00225	ug/L	112	(50-150)		
MS_202007210460	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00247	ug/L	107	(50-150)		
MSD_202007210460	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00230	ug/L	98	(50-150)	50	7.3
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0290	ug/L	116	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0272	ug/L	109	(70-130)	30	6.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00254	ug/L	127	(50-150)		
MS_202007210460	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00251	ug/L	105	(50-150)		
MSD_202007210460	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00244	ug/L	101	(50-150)	50	2.7
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0249	ug/L	100	(70-130)	30	5.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202007210460	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202007210460	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00204	ug/L	102	(50-150)	50	5.9
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0263	ug/L	105	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0248	ug/L	99	(70-130)	30	5.9
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00182	ug/L	91	(50-150)		
MS_202007210460	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00192	ug/L	96	(50-150)		
MSD_202007210460	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00196	ug/L	98	(50-150)	50	2.2

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1270621

Analysis Date: 08/25/2020

LCS1	Alkalinity in CaCO3 units		100	99.3	mg/L	99	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.5	mg/L	100	(90-110)	20	0.20
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.94	mg/L	97	(50-150)		
MS_202008180455	Alkalinity in CaCO3 units	320	100	386	mg/L	<u>62</u>	(80-120)		
MS_202008190241	Alkalinity in CaCO3 units	230	100	297	mg/L	<u>63</u>	(80-120)		
MSD_202008180455	Alkalinity in CaCO3 units	320	100	391	mg/L	<u>67</u>	(80-120)	20	1.2
MSD_202008190241	Alkalinity in CaCO3 units	230	100	289	mg/L	<u>55</u>	(80-120)	20	2.6

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for  
Presence or Absence, Quantification of Fecal Coliform  
By Quantitray**

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 08/26/2020

Quant Report - Page 1 of 1

, Tel Fax



**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 08/26/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large), MPN/100 mL (Total Coliform, E. Coli), Presence/Absence (P/A)\* (Total Coliform, E. Coli)

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 08/26/2020

Quant Report - Page 1 of 1

Tel Fax

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 888431  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 888431  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **August 20, 2020 at 1337**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202008200210	GAC-1-20200820 Static ID: 537.1 @537.1	08/20/2020 0833
202008200211	GAC-2-20200820 Static ID: 537.1 @537.1	08/20/2020 0836
202008200212	GAC-3-20200820 Static ID: 537.1 @537.1	08/20/2020 0839
202008200213	GAC-4-20200820 Static ID: 537.1 @537.1	08/20/2020 0842
202008200214	IX-1-20200820 Static ID: 537.1 @537.1	08/20/2020 0845
202008200215	IX-2-20200820 Static ID: 537.1 @537.1	08/20/2020 0848
202008200216	IX-3-20200820 Static ID: 537.1 @537.1	08/20/2020 0851
202008200217	IX-4-20200820 Static ID: 537.1 @537.1	08/20/2020 0854
202008200220	LH-INF-20200820 @ICP Uranium by ICPMS as pCi/L @VOASDWA Chloride Magnesium Total ICAP Perchlorate Sulfate Total Suspended Solids (TSS)	08/20/2020 0857 @ICPMS @ANIONS48 Calcium Total ICAP Iron Total ICAP Oil and Grease by 1664(subbed) Sodium Total ICAP Total Organic Carbon



### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 888431  
Project: 0250000  
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

The following samples were received from you on **August 20, 2020 at 1337**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202008200228</u>	GAC-5-20200820	08/20/2020 1033
	@537.1	
<u>202008200229</u>	GAC-6-20200820	08/20/2020 1036
	@537.1	
<u>202008200230</u>	GAC-7-20200820	08/20/2020 1039
	@537.1	
<u>202008200231</u>	GAC-8-20200820	08/20/2020 1042
	@537.1	
<u>202008200232</u>	IX-5-20200820	08/20/2020 1045
	@537.1	
<u>202008200233</u>	IX-6-20200820	08/20/2020 1048
	@537.1	
<u>202008200234</u>	IX-7-20200820	08/20/2020 1051
	@537.1	
<u>202008200235</u>	IX-8-20200820	08/20/2020 1054
	@537.1	
<u>202008200236</u>	MB-INF-20200820	08/20/2020 1057
	@ICP	Total Hardness as CaCO3 by ICP
	Uranium by ICPMS as pCi/L	@537.1
	@VOASDWA	Alkalinity in CaCO3 units
	Chloride	Hexavalent chromium(Dissolved)
	Magnesium Total ICAP	Manganese Total ICAP/MS
	Perchlorate	Potassium Total ICAP
	Sulfate	Total Dissolved Solid (TDS)
	Total Suspended Solids (TSS)	
	@ICPMS	
	@ANIONS48	
	Calcium Total ICAP	
	Iron Total ICAP	
	Oil and Grease by 1664(subbed)	
	Sodium Total ICAP	
	Total Organic Carbon	
<u>202008200237</u>	FB-HOLD-20200820	08/20/2020 1100
	@537.1 FB	

### Test Description

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 888431  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **August 20, 2020** at **1337**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@ICP -- ICP Metals	
	@ICPMS -- ICPMS Metals	
	@537.1 -- EPA Method 537.1	
	@537.1 FB -- EPA Method 537.1	
	@ANIONS48 -- Nitrate, Nitrite by EPA 300.0	
	@VOASDWA -- Volatile Organics by GCMS	





### Kit Order for Water Replenishment District

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

Created Date & Time 6/12/2020 5:36:13PM

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
(626) 386-1100 FAX (866) 988-3757

**Note: Sampler Please return this paper with your samples**

Client ID: WRD



Project Code: 0250000 Bottle Orders  
Group Name: WRD Pilot[Set#2]  
PO#/JOB#:

Description: WRD Pilot[Set#2]  
Shipping Method: Pickup by client



Kit #: 265925  
Created By: Anisha Zachariah - [ZR4B]  
Deliver By: 06/23/2020

STG: Bottle Orders  
Ice Type: G

**Ship Sample Kits to**  
GSI Environmental Inc.  
  
Attn: Robert Torres  
Phone: 951-616-8406

**Send Report to**  
Water Replenishment District  
4040 Paramount Blvd  
Lakewood, CA 90712  
  
Attn: Joseph Liles  
Phone: 562-275-4226

**Billing Address**  
Water Replenishment District  
  
Attn: Eurofins Calscience  
  
Water Replenishment District  
4040 Paramount Blvd  
Lakewood, CA 90712  
  
Attn: Brian Partington  
Phone: 562-275-4249  
Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [ preservative information ]	Total	UN DOT #
5	1 - 125ml amber glass [ 0.5 ml H2SO4 (50%) ]	5	UN1830
5	@ANIONS48, Chloride, Sulfate	5	
5	Alkalinity in CaCO3 units	5	
40	@537.1	80	
2	@537.1 TB	2	
2	@537.1 FB	2	
<b>Sum Tests: 59</b>		<b>Sum Bottles: 99</b>	

#### Comments

SHIPPING:  
- CLIENT PIU TUESDAY, JUNE 23RD MORNING  
- PACKAGE IN 4 x 32 QT COOLERS

GSI SAMPLER:  
- PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COC ALONG WITH THE SAMPLES.  
- NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP.

ASM:  
•Please also send invoices to Miae Jeon (mjeon@gsi-net.com)  
•Report copies to be sent to Miae Jeon, mjeon@gsi-net.com, Pat Galvin, pgalvin@gsi-net.com, and rdtorres@gsi-net.com.

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 855M

**SAMPLE TEMP RECEIVED:**

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

**SAMPLES REC'D DAY OF COLLECTION?** Yes / No

IR Gun ID = 631 (Observation = 23.0 °C) (Corr. Factor = -0.1 °C) (Final = 22.9 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up  Walk-In  FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

**Compliance Acceptance Criteria:**

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) VOA Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

**Headspace Documentation (use additional VOC Internal COFC for additional bottles)**

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: <u>Chuck Brook</u>	SIGNATURE: <u>Chuck Brook</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>8.20.20</u>	TIME: <u>1337</u>
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Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 888431  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

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**Folder Comments**

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove,  
CAELAP 2944 exp 9-30-2020

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202008200215</b>				
		<b><u>IX-2-20200820</u></b>				
08/27/2020 18:02	Perfluorohexanoic acid (PFHxA)		0.0027		ug/L	0.0020
		<b>202008200216</b>				
		<b><u>IX-3-20200820</u></b>				
08/27/2020 18:12	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
		<b>202008200217</b>				
		<b><u>IX-4-20200820</u></b>				
08/27/2020 18:31	Perfluorohexanoic acid (PFHxA)		0.0029		ug/L	0.0020
		<b>202008200220</b>				
		<b><u>LH-INF-20200820</u></b>				
08/27/2020 18:18	Alkalinity in CaCO3 units		200		mg/L	2.0
08/25/2020 14:57	Calcium Total ICAP		120		mg/L	10
08/20/2020 18:51	Chloride		110	250	mg/L	2.5
08/25/2020 20:41	Chloroform (Trichloromethane)		0.63		ug/L	0.50
08/27/2020 14:59	Hexavalent chromium(Dissolved)		0.67		ug/L	0.020
08/25/2020 14:57	Magnesium Total ICAP		21		mg/L	1.0
08/20/2020 18:51	Nitrate as Nitrogen by IC		2.9	10	mg/L	0.50
08/20/2020 18:51	Nitrate as NO3 (calc)		13	45	mg/L	2.2
08/27/2020 18:41	Perfluorobutanesulfonic acid (PFBS)		0.0060		ug/L	0.0020
08/27/2020 18:41	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
08/27/2020 18:41	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
08/27/2020 18:41	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
08/27/2020 18:41	Perfluorooctanesulfonic acid (PFOS)		0.029		ug/L	0.0020
08/27/2020 18:41	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
08/25/2020 14:57	Sodium Total ICAP		74		mg/L	10
08/20/2020 18:51	Sulfate		180	250	mg/L	2.5
08/25/2020 23:14	Total Dissolved Solids (TDS)		660	500	mg/L	10
08/26/2020 11:34	Total Hardness as CaCO3 by ICP (calc)		390		mg/L	3.0
08/20/2020 18:51	Total Nitrate, Nitrite-N, CALC		2.9		mg/L	0.10
08/26/2020 01:00	Total Organic Carbon		0.70		mg/L	0.20
08/25/2020 20:41	Total THM		0.63	80	ug/L	0.50
08/21/2020 21:10	Uranium by ICPMS as pCi/L		3.7		pCi/L	0.70
08/21/2020 20:20	Uranium ICAP/MS		5.6	30	ug/L	1.0
		<b>202008200232</b>				
		<b><u>IX-5-20200820</u></b>				
08/27/2020 21:52	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
		<b>202008200233</b>				
		<b><u>IX-6-20200820</u></b>				
08/27/2020 22:02	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**



Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202008200234</b>				
		<b><u>IX-7-20200820</u></b>				
08/27/2020 22:11	Perfluorohexanoic acid (PFHxA)		0.0049		ug/L	0.0020
		<b>202008200235</b>				
		<b><u>IX-8-20200820</u></b>				
08/27/2020 22:21	Perfluorohexanoic acid (PFHxA)		0.0046		ug/L	0.0020
		<b>202008200236</b>				
		<b><u>MB-INF-20200820</u></b>				
08/27/2020 18:09	Alkalinity in CaCO3 units		170		mg/L	2.0
08/25/2020 14:58	Calcium Total ICAP		62		mg/L	10
08/20/2020 18:38	Chloride		48	250	mg/L	2.5
08/27/2020 15:09	Hexavalent chromium(Dissolved)		0.44		ug/L	0.020
08/25/2020 14:58	Magnesium Total ICAP		12		mg/L	1.0
08/20/2020 18:38	Nitrate as Nitrogen by IC		2.6	10	mg/L	0.50
08/20/2020 18:38	Nitrate as NO3 (calc)		11	45	mg/L	2.2
08/27/2020 22:30	Perfluorobutanesulfonic acid (PFBS)		0.0093		ug/L	0.0020
08/27/2020 22:30	Perfluoroheptanoic acid (PFHpA)		0.0036		ug/L	0.0020
08/27/2020 22:30	Perfluorohexanesulfonic acid (PFHxS)		0.0065		ug/L	0.0020
08/27/2020 22:30	Perfluorohexanoic acid (PFHxA)		0.0049		ug/L	0.0020
08/27/2020 22:30	Perfluorononanoic acid (PFNA)		0.0035		ug/L	0.0020
08/27/2020 22:30	Perfluorooctanesulfonic acid (PFOS)		0.034		ug/L	0.0020
08/27/2020 22:30	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
08/25/2020 14:58	Sodium Total ICAP		55		mg/L	10
08/20/2020 18:38	Sulfate		77	250	mg/L	2.5
08/25/2020 23:15	Total Dissolved Solids (TDS)		390	500	mg/L	10
08/26/2020 11:34	Total Hardness as CaCO3 by ICP (calc)		200		mg/L	3.0
08/20/2020 18:38	Total Nitrate, Nitrite-N, CALC		2.6		mg/L	0.10
08/26/2020 01:17	Total Organic Carbon		0.82		mg/L	0.20
08/21/2020 21:10	Uranium by ICPMS as pCi/L		1.4		pCi/L	0.70
08/21/2020 20:22	Uranium ICAP/MS		2.1	30	ug/L	1.0

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20200820 (202008200210)</b>					<b>Sampled on 08/20/2020 0833</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	13C2-PFDA	93	%		1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	13C2-PFHxA	100	%		1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	93	%		1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	101	%		1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	97	%		1

<b>GAC-2-20200820 (202008200211)</b>					<b>Sampled on 08/20/2020 0836</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	13C2-PFDA	79	%		1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	13C2-PFHxA	82	%		1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	13C2-PFOA- IS#1	134	%		1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	13C3-HFPO-DA	81	%		1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	d3-NMeFOSAA	102	%		1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**GAC-3-20200820 (202008200212)**

Sampled on 08/20/2020 0839

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	13C2-PFDA	93	%		1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	13C2-PFHxA	97	%		1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	92	%		1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	103	%		1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	d5-NeFOSAA	98	%		1

**GAC-4-20200820 (202008200213)**

Sampled on 08/20/2020 0842

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	13C2-PFDA	88	%		1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	13C2-PFHxA	96	%		1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	114	%		1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	91	%		1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**IX-1-20200820 (202008200214)**

Static ID: 537.1

Sampled on 08/20/2020 0845

**EPA 537.1 - EPA Method 537.1**

08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	13C2-PFDA	94	%		1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	13C2-PFHxA	100	%		1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	95	%		1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	103	%		1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**IX-2-20200820 (202008200215)**

**Sampled on 08/20/2020 0848**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0027	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	13C2-PFDA	92	%		1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	13C2-PFHxA	102	%		1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	95	%		1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	103	%		1

Rounding on totals after summation.

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 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	97	%		1
<b>IX-3-20200820 (202008200216)</b>						<b>Sampled on 08/20/2020 0851</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	13C2-PFDA	92	%		1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	13C2-PFHxA	101	%		1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	96	%		1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	93	%		1
<b>IX-4-20200820 (202008200217)</b>						<b>Sampled on 08/20/2020 0854</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0029	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	13C2-PFDA	95	%		1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	13C2-PFHxA	102	%		1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	98	%		1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**LH-INF-20200820 (202008200220)**

Sampled on 08/20/2020 0857

**EPA 200.8 - ICPMS Metals**

08/21/20	08/21/20 20:20	1269926	1269852	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
08/21/20	08/21/20 20:20	1269926	1269852	(EPA 200.8)	Uranium ICAP/MS	5.6	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

08/21/20	08/25/20 14:57	1269926	1270599	(EPA 200.7)	Calcium Total ICAP	120	mg/L	10	10
08/21/20	08/25/20 14:57	1269926	1270599	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.20	10
08/21/20	08/25/20 14:57	1269926	1270599	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	1.0	10
08/21/20	08/25/20 14:57	1269926	1270599	(EPA 200.7)	Potassium Total ICAP	ND	mg/L	10	10
08/21/20	08/25/20 14:57	1269926	1270599	(EPA 200.7)	Sodium Total ICAP	74	mg/L	10	10

**SM 5310C - Total Organic Carbon**

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	08/26/20 01:00		1270615	(SM 5310C)	Total Organic Carbon	0.70	mg/L	0.20	1
<b>EPA 200.8 - Uranium by ICPMS as pCi/L</b>									
	08/21/20 21:10			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.7 (c)	pCi/L	0.70	1
<b>SM 2340B - Total Hardness as CaCO3 by ICP</b>									
	08/26/20 11:34			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	390 (c)	mg/L	3.0	1
<b>EPA 218.6 - Hexavalent chromium(Dissolved)</b>									
	08/27/20 14:59		1271276	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.67	ug/L	0.020	1
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>									
	08/20/20 18:51		1269832	(EPA 300.0)	Nitrate as Nitrogen by IC	2.9	mg/L	0.50	5
	08/20/20 18:51		1269832	(EPA 300.0)	Nitrate as NO3 (calc)	13	mg/L	2.2	5
	08/20/20 18:51		1269832	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	08/20/20 18:51		1269832	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.9	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	08/20/20 18:51		1269833	(EPA 300.0)	Chloride	110	mg/L	2.5	5
	08/20/20 18:51		1269833	(EPA 300.0)	Sulfate	180	mg/L	2.5	5
<b>EPA 314.0 - Perchlorate</b>									
	08/28/20 23:32	(1)	1271723	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0060	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.029	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1

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Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	13C2-PFDA	90	%		1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	13C2-PFHxA	100	%		1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	93	%		1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	93	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	08/25/20 14:54			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.95	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1

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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Chloroform (Trichloromethane)	0.63	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Total THM	0.63	ug/L	0.50	1

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08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,2-Dichloroethane-d4	106	%		1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	4-Bromofluorobenzene	102	%		1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Toluene-d8	90	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	08/27/20 18:18		1271304	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
08/25/20	08/25/20 23:14	1270721	1270724	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	660	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	08/26/20 21:25		1270719	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<b><u>GAC-5-20200820 (202008200228)</u></b>					<b>Sampled on 08/20/2020 1033</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	13C2-PFDA	84	%		1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	13C2-PFHxA	88	%		1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	124	%		1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	83	%		1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**GAC-6-20200820 (202008200229)**

Sampled on 08/20/2020 1036

**EPA 537.1 - EPA Method 537.1**

08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	13C2-PFDA	88	%		1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	13C2-PFHxA	97	%		1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	89	%		1

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 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**GAC-7-20200820 (202008200230)**

Sampled on 08/20/2020 1039

**EPA 537.1 - EPA Method 537.1**

08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	13C2-PFDA	113	%		1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	13C2-PFHxA	117	%		1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	13C3-HFPO-DA	108	%		1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	d3-NMeFOSAA	103	%		1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	d5-NEtFOSAA	115	%		1

**GAC-8-20200820 (202008200231)**

Sampled on 08/20/2020 1042

**EPA 537.1 - EPA Method 537.1**

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	13C2-PFDA	104	%		1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	13C2-PFHxA	102	%		1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	13C3-HFPO-DA	95	%		1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	d3-NMeFOSAA	103	%		1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**IX-5-20200820 (202008200232)**

**Sampled on 08/20/2020 1045**

**EPA 537.1 - EPA Method 537.1**

08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.  
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Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	13C2-PFDA	104	%		1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	13C2-PFHxA	105	%		1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	13C3-HFPO-DA	98	%		1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**IX-6-20200820 (202008200233)**

**Sampled on 08/20/2020 1048**

**EPA 537.1 - EPA Method 537.1**

08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

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 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	13C2-PFDA	89	%		1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	13C2-PFHxA	93	%		1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	13C2-PFOA- IS#1	126	%		1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	13C3-HFPO-DA	88	%		1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**IX-7-20200820 (202008200234)**

Sampled on 08/20/2020 1051

**EPA 537.1 - EPA Method 537.1**

08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0049	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	13C2-PFDA	104	%		1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	13C2-PFHxA	108	%		1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	13C3-HFPO-DA	102	%		1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**IX-8-20200820 (202008200235)**

Sampled on 08/20/2020 1054

**EPA 537.1 - EPA Method 537.1**

08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	13C2-PFDA	107	%		1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	13C2-PFHxA	109	%		1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1

Rounding on totals after summation.  
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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	13C3-HFPO-DA	103	%		1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	d5-NEtFOSAA	103	%		1
<b>MB-INF-20200820 (202008200236)</b>						<b>Sampled on 08/20/2020 1057</b>			
<b>EPA 200.8 - ICPMS Metals</b>									
08/21/20	08/21/20 20:22	1269926	1269852	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
08/21/20	08/21/20 20:22	1269926	1269852	(EPA 200.8)	Uranium ICAP/MS	2.1	ug/L	1.0	1
<b>EPA 200.7 - ICP Metals</b>									
08/21/20	08/25/20 14:58	1269926	1270599	(EPA 200.7)	Calcium Total ICAP	62	mg/L	10	10
08/21/20	08/25/20 14:58	1269926	1270599	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.20	10
08/21/20	08/25/20 14:58	1269926	1270599	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	1.0	10
08/21/20	08/25/20 14:58	1269926	1270599	(EPA 200.7)	Potassium Total ICAP	ND	mg/L	10	10
08/21/20	08/25/20 14:58	1269926	1270599	(EPA 200.7)	Sodium Total ICAP	55	mg/L	10	10
<b>SM 5310C - Total Organic Carbon</b>									
08/26/20	01:17		1270615	(SM 5310C)	Total Organic Carbon	0.82	mg/L	0.20	1
<b>EPA 200.8 - Uranium by ICPMS as pCi/L</b>									
08/21/20	21:10			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.4 (c)	pCi/L	0.70	1
<b>SM 2340B - Total Hardness as CaCO3 by ICP</b>									
08/26/20	11:34			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	200 (c)	mg/L	3.0	1
<b>EPA 218.6 - Hexavalent chromium(Dissolved)</b>									
08/27/20	15:09		1271276	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.44	ug/L	0.020	1
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>									
08/20/20	18:38		1269832	(EPA 300.0)	Nitrate as Nitrogen by IC	2.6	mg/L	0.50	5
08/20/20	18:38		1269832	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
08/20/20	18:38		1269832	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
08/20/20	18:38		1269832	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.6	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
08/20/20	18:38		1269833	(EPA 300.0)	Chloride	48	mg/L	2.5	5
08/20/20	18:38		1269833	(EPA 300.0)	Sulfate	77	mg/L	2.5	5
<b>EPA 314.0 - Perchlorate</b>									
08/28/20	23:57	(1)	1271723	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	11-chloroheicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0093	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0036	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0065	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0049	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0035	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.034	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	13C2-PFDA	101	%		1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	13C2-PFHxA	107	%		1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	13C3-HFPO-DA	101	%		1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	d5-NEtFOSAA	100	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	08/25/20 14:54			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.97	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1

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 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1

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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,2-Dichloroethane-d4	106	%		1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	4-Bromofluorobenzene	111	%		1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Toluene-d8	90	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	08/27/20 18:09		1271304	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
08/25/20	08/25/20 23:15	1270721	1270724	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	390	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	08/26/20 21:26		1270719	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<b>FB-HOLD-20200820 (202008200237)</b>									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Sampled on 08/20/2020 1100

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	13C2-PFDA	122	%		1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	13C2-PFHxA	109	%		1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	13C3-HFPO-DA	104	%		1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	d5-NEtFOSAA	119	%		1

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**Report:** 888431  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

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**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1269832**

202008200220 LH-INF-20200820  
 202008200236 MB-INF-20200820

**Analysis Date: 08/20/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1269833**

202008200220 LH-INF-20200820  
 202008200236 MB-INF-20200820

**Analysis Date: 08/20/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**ICPMS Metals**

**Prep Batch: 1269926 Analytical Batch: 1269852**

202008200220 LH-INF-20200820  
 202008200236 MB-INF-20200820

**Analysis Date: 08/21/2020**

Analyzed by: DHX7  
 Analyzed by: DHX7

**ICP Metals**

**Prep Batch: 1269926 Analytical Batch: 1270599**

202008200220 LH-INF-20200820  
 202008200236 MB-INF-20200820

**Analysis Date: 08/25/2020**

Analyzed by: Y7TT  
 Analyzed by: Y7TT

**Total Organic Carbon**

**Analytical Batch: 1270615**

202008200220 LH-INF-20200820  
 202008200236 MB-INF-20200820

**Analysis Date: 08/26/2020**

Analyzed by: ZB2Z  
 Analyzed by: ZB2Z

**Total Suspended Solids (TSS)**

**Analytical Batch: 1270719**

202008200220 LH-INF-20200820  
 202008200236 MB-INF-20200820

**Analysis Date: 08/26/2020**

Analyzed by: TJ52  
 Analyzed by: TJ52

**Total Dissolved Solids (TDS)**

**Prep Batch: 1270721 Analytical Batch: 1270724**

202008200220 LH-INF-20200820  
 202008200236 MB-INF-20200820

**Analysis Date: 08/25/2020**

Analyzed by: TJ52  
 Analyzed by: TJ52

**Volatile Organics by GCMS**

**Prep Batch: 1270778 Analytical Batch: 1270782**

202008200220 LH-INF-20200820  
 202008200236 MB-INF-20200820

**Analysis Date: 08/25/2020**

Analyzed by: TR7W  
 Analyzed by: TR7W

**EPA Method 537.1**

**Prep Batch: 1270381 Analytical Batch: 1270852**

202008200230 GAC-7-20200820

**Analysis Date: 08/26/2020**

Analyzed by: SZZ

**Hexavalent chromium(Dissolved)**

**Analytical Batch: 1271276**

202008200220 LH-INF-20200820  
 202008200236 MB-INF-20200820

**Analysis Date: 08/27/2020**

Analyzed by: TLH  
 Analyzed by: TLH



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**Report:** 888431  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

**Alkalinity in CaCO3 units**

**Analytical Batch: 1271304**

202008200220                    LH-INF-20200820  
 202008200236                    MB-INF-20200820

**Analysis Date: 08/27/2020**

Analyzed by: ZS6I  
 Analyzed by: ZS6I

**EPA Method 537.1**

**Prep Batch: 1270265 Analytical Batch: 1271398**

202008200210                    GAC-1-20200820  
 202008200212                    GAC-3-20200820  
 202008200213                    GAC-4-20200820  
 202008200214                    IX-1-20200820  
 202008200215                    IX-2-20200820  
 202008200216                    IX-3-20200820  
 202008200217                    IX-4-20200820  
 202008200220                    LH-INF-20200820  
 202008200228                    GAC-5-20200820  
 202008200229                    GAC-6-20200820

**Analysis Date: 08/27/2020**

Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM

**EPA Method 537.1**

**Prep Batch: 1270278 Analytical Batch: 1271408**

202008200231                    GAC-8-20200820  
 202008200232                    IX-5-20200820  
 202008200233                    IX-6-20200820  
 202008200234                    IX-7-20200820  
 202008200235                    IX-8-20200820  
 202008200236                    MB-INF-20200820

**Analysis Date: 08/27/2020**

Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM

**EPA Method 537.1**

**Prep Batch: 1270265 Analytical Batch: 1271561**

202008200211                    GAC-2-20200820

**Analysis Date: 08/28/2020**

Analyzed by: Y7BM

**Perchlorate**

**Analytical Batch: 1271723**

202008200220                    LH-INF-20200820  
 202008200236                    MB-INF-20200820

**Analysis Date: 08/28/2020**

Analyzed by: H5VG  
 Analyzed by: H5VG

**EPA Method 537.1**

**Prep Batch: 1271848 Analytical Batch: 1272407**

202008200237                    FB-HOLD-20200820

**Analysis Date: 09/01/2020**

Analyzed by: KAM

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Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1269832</b>					<b>Analysis Date: 08/20/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.59	mg/L	104	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.59	mg/L	104	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0487	mg/L	97	(50-150)		
MS_202008200193	Nitrate as Nitrogen by IC	8.6	2.6	11.4	mg/L	110	(80-120)		
MS_202008200220	Nitrate as Nitrogen by IC	2.9	6.5	9.04	mg/L	99	(80-120)		
MSD_202008200193	Nitrate as Nitrogen by IC	8.6	2.6	11.3	mg/L	107	(80-120)	20	0.47
MSD_202008200220	Nitrate as Nitrogen by IC	2.9	6.5	9.56	mg/L	107	(80-120)	20	5.7
LCS1	Nitrite Nitrogen by IC		1	1.08	mg/L	108	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.08	mg/L	108	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0548	mg/L	110	(50-150)		
MS_202008200193	Nitrite Nitrogen by IC	ND	1	1.01	mg/L	101	(80-120)		
MS_202008200220	Nitrite Nitrogen by IC	ND	2.5	2.45	mg/L	98	(80-120)		
MSD_202008200193	Nitrite Nitrogen by IC	ND	1	1.01	mg/L	101	(80-120)	20	0.0099
MSD_202008200220	Nitrite Nitrogen by IC	ND	2.5	2.70	mg/L	108	(80-120)	20	9.8
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1269833</b>					<b>Analysis Date: 08/20/2020</b>				
LCS1	Chloride		25	26.8	mg/L	107	(90-110)		
LCS2	Chloride		25	26.8	mg/L	107	(90-110)	20	0.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.461	mg/L	92	(50-150)		
MS_202008200220	Chloride	110	65	173	mg/L	102	(80-120)		
MSD_202008200220	Chloride	110	65	178	mg/L	109	(80-120)	20	2.9
LCS1	Sulfate		50	52.8	mg/L	106	(90-110)		
LCS2	Sulfate		50	52.5	mg/L	105	(90-110)	20	0.57
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.974	mg/L	97	(50-150)		
MRLW	Sulfate		0.25	0.224	mg/L	90	(50-150)		
MS_202008200220	Sulfate	180	125	303	mg/L	99	(80-120)		
MSD_202008200220	Sulfate	180	125	315	mg/L	108	(80-120)	20	3.8

ICPMS Metals by EPA 200.8

Analytical Batch: 1269852

Analysis Date: 08/21/2020

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Manganese Total ICAP/MS		100	101	ug/L	101	(85-115)		
LCS2	Manganese Total ICAP/MS		100	100	ug/L	101	(85-115)	20	0.0
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.00	ug/L	100	(50-150)		
MS_202008180173	Manganese Total ICAP/MS	9.3	100	97.6	ug/L	88	(70-130)		
MS2_202008190750	Manganese Total ICAP/MS	ND	100	90.1	ug/L	90	(70-130)		
MSD_202008180173	Manganese Total ICAP/MS	9.3	100	97.5	ug/L	88	(70-130)	20	0.070
MSD2_202008190750	Manganese Total ICAP/MS	ND	100	88.8	ug/L	89	(70-130)	20	1.4
LCS1	Uranium ICAP/MS		50	50.6	ug/L	101	(85-115)		
LCS2	Uranium ICAP/MS		50	49.9	ug/L	100	(85-115)	20	1.4
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.971	ug/L	97	(50-150)		
MS_202008180173	Uranium ICAP/MS	7	50	57.7	ug/L	101	(70-130)		
MS2_202008190750	Uranium ICAP/MS	ND	50	45.5	ug/L	91	(70-130)		
MSD_202008180173	Uranium ICAP/MS	7	50	58.9	ug/L	104	(70-130)	20	2.0
MSD2_202008190750	Uranium ICAP/MS	ND	50	45.1	ug/L	90	(70-130)	20	0.82

ICP Metals by EPA 200.7

Analytical Batch: 1270599

Analysis Date: 08/25/2020

LCS1	Calcium Total ICAP		50	49.7	mg/L	99	(85-115)		
LCS2	Calcium Total ICAP		50	49.5	mg/L	99	(85-115)	20	0.40
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.958	mg/L	96	(50-150)		
MS_202008190486	Calcium Total ICAP	9	50	57.7	mg/L	97	(70-130)		
MS2_202008200588	Calcium Total ICAP	7.9	50	57.3	mg/L	99	(70-130)		
MSD_202008190486	Calcium Total ICAP	9	50	58.6	mg/L	99	(70-130)	20	1.6
MSD2_202008200588	Calcium Total ICAP	7.9	50	58.3	mg/L	101	(70-130)	20	1.8
LCS1	Iron Total ICAP		5	4.98	mg/L	100	(85-115)		
LCS2	Iron Total ICAP		5	4.96	mg/L	99	(85-115)	20	0.40
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0200	mg/L	100	(50-150)		
MS_202008190486	Iron Total ICAP	ND	5	4.92	mg/L	98	(70-130)		
MS2_202008200588	Iron Total ICAP	ND	5	4.95	mg/L	99	(70-130)		
MSD_202008190486	Iron Total ICAP	ND	5	5.01	mg/L	100	(70-130)	20	1.8
MSD2_202008200588	Iron Total ICAP	ND	5	5.04	mg/L	101	(70-130)	20	1.9
LCS1	Magnesium Total ICAP		20	19.6	mg/L	98	(85-115)		
LCS2	Magnesium Total ICAP		20	19.5	mg/L	98	(85-115)	20	0.51
MBLK	Magnesium Total ICAP			<0.05	mg/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Magnesium Total ICAP		0.1	0.0888	mg/L	89	(50-150)		
MS_202008190486	Magnesium Total ICAP	1.4	20	21.0	mg/L	98	(70-130)		
MS2_202008200588	Magnesium Total ICAP	0.76	20	20.5	mg/L	99	(70-130)		
MSD_202008190486	Magnesium Total ICAP	1.4	20	21.4	mg/L	100	(70-130)	20	1.8
MSD2_202008200588	Magnesium Total ICAP	0.76	20	20.9	mg/L	101	(70-130)	20	2.0
LCS1	Potassium Total ICAP		20	19.6	mg/L	98	(85-115)		
LCS2	Potassium Total ICAP		20	19.6	mg/L	98	(85-115)	20	0.0
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.626	mg/L	63	(50-150)		
MS_202008190486	Potassium Total ICAP	ND	20	20.5	mg/L	101	(70-130)		
MS2_202008200588	Potassium Total ICAP	ND	20	20.8	mg/L	103	(70-130)		
MSD_202008190486	Potassium Total ICAP	ND	20	20.8	mg/L	103	(70-130)	20	1.4
MSD2_202008200588	Potassium Total ICAP	ND	20	21.2	mg/L	105	(70-130)	20	1.9
LCS1	Sodium Total ICAP		50	49.0	mg/L	98	(85-115)		
LCS2	Sodium Total ICAP		50	48.8	mg/L	98	(85-115)	20	0.41
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.933	mg/L	93	(50-150)		
MS_202008190486	Sodium Total ICAP	4.2	50	52.1	mg/L	96	(70-130)		
MS2_202008200588	Sodium Total ICAP	9.2	50	56.9	mg/L	95	(70-130)		
MSD_202008190486	Sodium Total ICAP	4.2	50	53.1	mg/L	98	(70-130)	20	2.0
MSD2_202008200588	Sodium Total ICAP	9.2	50	57.8	mg/L	97	(70-130)	20	1.6

**Total Organic Carbon by SM 5310C**

Analytical Batch: 1270615

Analysis Date: 08/25/2020

LCS1	Total Organic Carbon		5	5.13	mg/L	103	(90-110)		
LCS2	Total Organic Carbon		5	5.04	mg/L	101	(90-110)	20	1.8
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.251	mg/L	125	(50-150)		
MS_202008210479	Total Organic Carbon	3.6	4	7.60	mg/L	101	(80-120)		
MSD_202008210479	Total Organic Carbon	3.6	4	7.61	mg/L	101	(80-120)	20	0.12

**Total Suspended Solids (TSS) by SM 2540D**

Analytical Batch: 1270719

Analysis Date: 08/26/2020

DUP_202007150064	Total Suspended Solids (TSS)	310		284	mg/L		(0-10)	10	7.5
DUP_202007150075	Total Suspended Solids (TSS)	58		60.0	mg/L		(0-10)	10	3.4
LCS1	Total Suspended Solids (TSS)		175	156	mg/L	89	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	176	mg/L	101	(71-107)	20	12
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	10.0	mg/L	100	(50-150)		

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Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Total Dissolved Solids (TDS) by E160.1/SM2540C</b>									
<b>Analytical Batch: 1270724</b>					<b>Analysis Date: 08/25/2020</b>				
DUP_202008190786	Total Dissolved Solid (TDS)	480		482	mg/L		(0-10)	10	0.42
DUP_202008200188	Total Dissolved Solid (TDS)	280		272	mg/L		(0-10)	10	2.2
LCS1	Total Dissolved Solid (TDS)		175	168	mg/L	96	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	704	mg/L	101	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	9.00	mg/L	90	(50-150)		
<b>Volatile Organics by GCMS by EPA 524.2</b>									
<b>Analytical Batch: 1270782</b>					<b>Analysis Date: 08/25/2020</b>				
LCS1	1,1,1,2-Tetrachloroethane		5	4.89	ug/L	98	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	5.15	ug/L	103	(70-130)	20	5.2
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.92	ug/L	98	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.99	ug/L	100	(70-130)	20	1.4
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.35	ug/L	107	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	5.32	ug/L	106	(70-130)	20	0.56
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.49	ug/L	90	(70-130)		
LCS2	1,1,2-Trichloroethane		5	4.47	ug/L	89	(70-130)	20	0.45
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	1,1-Dichloroethane		5	5.05	ug/L	101	(70-130)		
LCS2	1,1-Dichloroethane		5	5.21	ug/L	104	(70-130)	20	3.1
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.560	ug/L	112	(50-150)		
LCS1	1,1-Dichloroethylene		5	5.07	ug/L	101	(70-130)		
LCS2	1,1-Dichloroethylene		5	5.19	ug/L	104	(70-130)	20	2.3
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.580	ug/L	116	(50-150)		
LCS1	1,1-Dichloropropene		5	4.83	ug/L	97	(70-130)		
LCS2	1,1-Dichloropropene		5	4.92	ug/L	98	(70-130)	20	1.9
MBLK	1,1-Dichloropropene			<0.5	ug/L				

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	1,1-Dichloropropene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.51	ug/L	90	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	4.35	ug/L	87	(70-130)	20	3.6
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.690	ug/L	138	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.04	ug/L	101	(70-130)		
LCS2	1,2,3-Trichloropropane		5	4.93	ug/L	99	(70-130)	20	2.2
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.30	ug/L	86	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	4.39	ug/L	88	(70-130)	20	2.1
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.92	ug/L	98	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	4.85	ug/L	97	(70-130)	20	1.4
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.700	ug/L	140	(50-150)		
LCS1	1,2-Dichloroethane		5	5.09	ug/L	102	(70-130)		
LCS2	1,2-Dichloroethane		5	5.16	ug/L	103	(70-130)	20	1.4
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	103	%	103	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			104	%	104	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	104	%	104	(70-130)		
MRLLLW	1,2-Dichloroethane-d4 (S)		5	107	%	107	(70-130)		
LCS1	1,2-Dichloropropane		5	4.83	ug/L	97	(70-130)		
LCS2	1,2-Dichloropropane		5	5.02	ug/L	100	(70-130)	20	3.9
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	5.13	ug/L	103	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	5.17	ug/L	103	(70-130)	20	0.78
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,3-Dichloropropane		5	4.49	ug/L	90	(70-130)		
LCS2	1,3-Dichloropropane		5	4.71	ug/L	94	(70-130)	20	4.8
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.470	ug/L	94	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 888431  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	2,2-Dichloropropane		5	4.52	ug/L	90	(70-130)		
LCS2	2,2-Dichloropropane		5	4.96	ug/L	99	(70-130)	20	9.3
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.520	ug/L	104	(50-150)		
LCS1	2-Butanone (MEK)		50	48.6	ug/L	97	(70-130)		
LCS2	2-Butanone (MEK)		50	46.9	ug/L	94	(70-130)	20	3.8
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.73	ug/L	115	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	101	%	101	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	105	%	105	(70-130)		
MBLK	4-Bromofluorobenzene (S)			101	%	101	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	99.6	%	100	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	104	%	104	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	44.6	ug/L	89	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	45.8	ug/L	92	(70-130)	20	2.6
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.67	ug/L	93	(50-150)		
LCS1	Benzene		5	5.18	ug/L	104	(70-130)		
LCS2	Benzene		5	5.30	ug/L	106	(70-130)	20	2.3
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Bromobenzene		5	5.10	ug/L	102	(70-130)		
LCS2	Bromobenzene		5	5.36	ug/L	107	(70-130)	20	5.0
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	Bromochloromethane		5	4.97	ug/L	99	(70-130)		
LCS2	Bromochloromethane		5	4.89	ug/L	98	(70-130)	20	1.6
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.640	ug/L	128	(50-150)		
LCS1	Bromodichloromethane		5	4.71	ug/L	94	(70-130)		
LCS2	Bromodichloromethane		5	5.02	ug/L	100	(70-130)	20	6.4
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.400	ug/L	80	(50-150)		
LCS1	Bromoethane		5	5.33	ug/L	107	(70-130)		
LCS2	Bromoethane		5	5.67	ug/L	113	(70-130)	20	6.2
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.620	ug/L	124	(50-150)		
LCS1	Bromoform		5	4.56	ug/L	91	(70-130)		

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RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Bromoform		5	4.50	ug/L	90	(70-130)	20	1.3
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.490	ug/L	98	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.23	ug/L	105	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.38	ug/L	108	(70-130)	20	2.8
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.630	ug/L	126	(50-150)		
LCS1	Carbon disulfide		5	4.98	ug/L	100	(70-130)		
LCS2	Carbon disulfide		5	5.09	ug/L	102	(70-130)	20	2.2
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.430	ug/L	86	(50-150)		
LCS1	Carbon Tetrachloride		5	4.80	ug/L	96	(70-130)		
LCS2	Carbon Tetrachloride		5	4.68	ug/L	94	(70-130)	20	2.5
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.490	ug/L	98	(50-150)		
LCS1	Chlorobenzene		5	4.51	ug/L	90	(70-130)		
LCS2	Chlorobenzene		5	4.61	ug/L	92	(70-130)	20	2.2
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.400	ug/L	80	(50-150)		
LCS1	Chlorodibromomethane		5	4.00	ug/L	80	(70-130)		
LCS2	Chlorodibromomethane		5	4.12	ug/L	82	(70-130)	20	3.0
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.360	ug/L	72	(50-150)		
LCS1	Chloroethane		5	5.34	ug/L	107	(70-130)		
LCS2	Chloroethane		5	5.46	ug/L	109	(70-130)	20	2.2
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.590	ug/L	118	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.93	ug/L	99	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	5.02	ug/L	100	(70-130)	20	1.8
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.540	ug/L	108	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.54	ug/L	91	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.59	ug/L	92	(70-130)	20	1.1
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.660	ug/L	132	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	5.17	ug/L	103	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	5.08	ug/L	102	(70-130)	20	1.8
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



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Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.560	ug/L	112	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.50	ug/L	90	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.59	ug/L	92	(70-130)	20	2.0
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.410	ug/L	82	(50-150)		
LCS1	Dibromomethane		5	4.53	ug/L	91	(70-130)		
LCS2	Dibromomethane		5	4.52	ug/L	90	(70-130)	20	0.22
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Dichlorodifluoromethane		5	4.55	ug/L	91	(70-130)		
LCS2	Dichlorodifluoromethane		5	4.92	ug/L	98	(70-130)	20	7.8
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	Dichloromethane		5	5.49	ug/L	110	(70-130)		
LCS2	Dichloromethane		5	5.22	ug/L	104	(70-130)	20	5.0
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	Di-isopropyl ether		5	4.95	ug/L	99	(70-130)		
LCS2	Di-isopropyl ether		5	5.06	ug/L	101	(70-130)	20	2.2
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.530	ug/L	106	(50-150)		
LCS1	Ethyl benzene		5	4.77	ug/L	95	(70-130)		
LCS2	Ethyl benzene		5	4.96	ug/L	99	(70-130)	20	3.9
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	Hexachlorobutadiene		5	4.42	ug/L	88	(70-130)		
LCS2	Hexachlorobutadiene		5	5.08	ug/L	102	(70-130)	20	14
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.570	ug/L	114	(50-150)		
LCS1	Isopropylbenzene		5	5.25	ug/L	105	(70-130)		
LCS2	Isopropylbenzene		5	5.19	ug/L	104	(70-130)	20	1.1
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	m,p-Xylenes		10	9.89	ug/L	99	(70-130)		
LCS2	m,p-Xylenes		10	10.2	ug/L	102	(70-130)	20	4.1
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	1.11	ug/L	111	(50-150)		
MRLW	m,p-Xylenes		0.5	0.600	ug/L	120	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	m-Dichlorobenzene (1,3-DCB)		5	5.23	ug/L	105	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	5.31	ug/L	106	(70-130)	20	1.5
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.470	ug/L	94	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	4.93	ug/L	99	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	5.09	ug/L	102	(70-130)	20	3.2
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.650	ug/L	130	(50-150)		
LCS1	Naphthalene		5	4.14	ug/L	83	(70-130)		
LCS2	Naphthalene		5	4.19	ug/L	84	(70-130)	20	1.2
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.570	ug/L	114	(50-150)		
LCS1	n-Butylbenzene		5	4.96	ug/L	99	(70-130)		
LCS2	n-Butylbenzene		5	4.87	ug/L	97	(70-130)	20	1.8
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	n-Propylbenzene		5	5.06	ug/L	101	(70-130)		
LCS2	n-Propylbenzene		5	5.29	ug/L	106	(70-130)	20	4.4
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	o-Chlorotoluene		5	5.46	ug/L	109	(70-130)		
LCS2	o-Chlorotoluene		5	5.38	ug/L	108	(70-130)	20	1.5
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.510	ug/L	102	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.84	ug/L	97	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	4.97	ug/L	99	(70-130)	20	2.6
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.480	ug/L	96	(50-150)		
LCS1	o-Xylene		5	4.75	ug/L	95	(70-130)		
LCS2	o-Xylene		5	5.02	ug/L	100	(70-130)	20	5.5
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.550	ug/L	110	(50-150)		
LCS1	p-Chlorotoluene		5	5.18	ug/L	104	(70-130)		
LCS2	p-Chlorotoluene		5	5.35	ug/L	107	(70-130)	20	3.2
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.500	ug/L	100	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	5.09	ug/L	102	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.45	ug/L	109	(70-130)	20	6.8

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 888431  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.470	ug/L	94	(50-150)		
LCS1	p-Isopropyltoluene		5	5.15	ug/L	103	(70-130)		
LCS2	p-Isopropyltoluene		5	5.41	ug/L	108	(70-130)	20	4.9
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.710	ug/L	142	(50-150)		
LCS1	sec-Butylbenzene		5	5.55	ug/L	111	(70-130)		
LCS2	sec-Butylbenzene		5	5.53	ug/L	111	(70-130)	20	0.36
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.690	ug/L	138	(50-150)		
LCS1	Styrene		5	4.63	ug/L	93	(70-130)		
LCS2	Styrene		5	4.76	ug/L	95	(70-130)	20	2.8
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.540	ug/L	108	(50-150)		
LCS1	tert-amyl Methyl Ether		5	4.26	ug/L	85	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.31	ug/L	86	(70-130)	20	1.2
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.430	ug/L	86	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	4.70	ug/L	94	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	4.77	ug/L	95	(70-130)	20	1.5
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.450	ug/L	90	(50-150)		
LCS1	tert-Butylbenzene		5	5.39	ug/L	108	(70-130)		
LCS2	tert-Butylbenzene		5	5.31	ug/L	106	(70-130)	20	1.5
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.460	ug/L	92	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.18	ug/L	84	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.43	ug/L	89	(70-130)	20	5.8
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.420	ug/L	84	(50-150)		
LCS1	Toluene		5	4.69	ug/L	94	(70-130)		
LCS2	Toluene		5	4.86	ug/L	97	(70-130)	20	3.6
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.460	ug/L	92	(50-150)		
LCS1	Toluene-d8 (S)		5	97.6	%	98	(70-130)		
LCS2	Toluene-d8 (S)		5	99.6	%	100	(70-130)		
MBLK	Toluene-d8 (S)			91.6	%	92	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	91.6	%	92	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 888431  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRLW	Toluene-d8 (S)		5	89.4	%	89	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	5.75	ug/L	115	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	5.60	ug/L	112	(70-130)	20	2.6
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.530	ug/L	106	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.24	ug/L	85	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.53	ug/L	91	(70-130)	20	6.6
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.460	ug/L	92	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.81	ug/L	96	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.86	ug/L	97	(70-130)	20	1.0
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.430	ug/L	86	(50-150)		
LCS1	Trichlorofluoromethane		5	4.62	ug/L	92	(70-130)		
LCS2	Trichlorofluoromethane		5	4.73	ug/L	95	(70-130)	20	2.4
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	4.97	ug/L	99	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	5.07	ug/L	101	(70-130)	20	2.0
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Vinyl chloride (VC)		5	5.06	ug/L	101	(70-130)		
LCS2	Vinyl chloride (VC)		5	5.11	ug/L	102	(70-130)	20	0.98
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.510	ug/L	102	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.280	ug/L	112	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1270381 Analytical Batch: 1270852

Analysis Date: 08/26/2020

DUP_202008200514	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0219	ug/L	93	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0221	ug/L	94	(70-130)	30	0.91
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00160	ug/L	85	(50-150)		
MS1_202008200511	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0218	ug/L	93	(70-130)		
DUP_202008200514	13C2-PFDA (S)			127	%	127	(70-130)		
LCS1	13C2-PFDA (S)		100	124	%	124	(70-130)		
LCS2	13C2-PFDA (S)		100	125	%	125	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 888431  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFDA (S)			123	%	123	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	119	%	119	(70-130)		
MS1_202008200511	13C2-PFDA (S)		100	127	%	127	(70-130)		
DUP_202008200514	13C2-PFHxA (S)			128	%	128	(70-130)		
LCS1	13C2-PFHxA (S)		100	129	%	129	(70-130)		
LCS2	13C2-PFHxA (S)		100	131	%	<b>131</b>	(70-130)		
MBLK	13C2-PFHxA (S)			128	%	128	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	126	%	126	(70-130)		
MS1_202008200511	13C2-PFHxA (S)		100	133	%	<b>133</b>	(70-130)		
DUP_202008200514	13C2-PFOA- IS#1 (I)			105	%	105	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			110	%	110	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	110	%	111	(50-150)		
MS1_202008200511	13C2-PFOA- IS#1 (I)		100	115	%	115	(50-150)		
DUP_202008200514	13C3-HFPO-DA (S)			107	%	107	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	121	%	121	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	122	%	122	(70-130)		
MBLK	13C3-HFPO-DA (S)			120	%	120	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	117	%	117	(70-130)		
MS1_202008200511	13C3-HFPO-DA (S)		100	124	%	124	(70-130)		
DUP_202008200514	13C4-PFOS- IS#2 (I)			96.4	%	96	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	99.7	%	100	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	96.0	%	96	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
MS1_202008200511	13C4-PFOS- IS#2 (I)		100	110	%	110	(50-150)		
DUP_202008200514	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0238	ug/L	101	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0244	ug/L	103	(70-130)	30	2.5
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00192	ug/L	101	(50-150)		
MS1_202008200511	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0238	ug/L	100	(70-130)		
DUP_202008200514	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0242	ug/L	104	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0238	ug/L	102	(70-130)	30	1.7
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00187	ug/L	100	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202008200511	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0233	ug/L	100	(70-130)		
DUP_202008200514	d3-NMeFOSAA (I)			102	%	102	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	99.6	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			107	%	107	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
MS1_202008200511	d3-NMeFOSAA (I)		100	114	%	114	(50-150)		
DUP_202008200514	d5-NEtFOSAA (S)			113	%	113	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	123	%	123	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	121	%	121	(70-130)		
MBLK	d5-NEtFOSAA (S)			123	%	123	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	122	%	123	(70-130)		
MS1_202008200511	d5-NEtFOSAA (S)		100	116	%	116	(70-130)		
DUP_202008200514	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0238	ug/L	95	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0249	ug/L	100	(70-130)	30	4.5
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00189	ug/L	95	(50-150)		
MS1_202008200511	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0257	ug/L	103	(70-130)		
DUP_202008200514	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0251	ug/L	100	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0251	ug/L	100	(70-130)	30	0.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00203	ug/L	102	(50-150)		
MS1_202008200511	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0249	ug/L	100	(70-130)		
DUP_202008200514	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0254	ug/L	102	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0264	ug/L	106	(70-130)	30	3.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00210	ug/L	105	(50-150)		
MS1_202008200511	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0262	ug/L	105	(70-130)		
DUP_202008200514	Perfluorobutanesulfonic acid (PFBS)	0.020		0.0195	ug/L		(0-30)	30	3.7
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0231	ug/L	104	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0237	ug/L	107	(70-130)	30	2.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00184	ug/L	104	(50-150)		
MS1_202008200511	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0267	ug/L	113	(70-130)		
DUP_202008200514	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0252	ug/L	101	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0247	ug/L	99	(70-130)	30	2.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00196	ug/L	98	(50-150)		
MS1_202008200511	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0253	ug/L	101	(70-130)		
DUP_202008200514	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0244	ug/L	98	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0243	ug/L	97	(70-130)	30	0.41
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00184	ug/L	92	(50-150)		
MS1_202008200511	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0240	ug/L	96	(70-130)		
DUP_202008200514	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0264	ug/L	105	(70-130)	30	1.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00218	ug/L	109	(50-150)		
MS1_202008200511	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0252	ug/L	101	(70-130)		
DUP_202008200514	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0241	ug/L	106	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0247	ug/L	108	(70-130)	30	2.5
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00194	ug/L	107	(50-150)		
MS1_202008200511	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0244	ug/L	107	(70-130)		
DUP_202008200514	Perfluorohexanoic acid (PFHxA)	0.0060		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0263	ug/L	105	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0259	ug/L	104	(70-130)	30	1.5
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00214	ug/L	107	(50-150)		
MS1_202008200511	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0268	ug/L	107	(70-130)		
DUP_202008200514	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0258	ug/L	103	(70-130)	30	1.2
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00208	ug/L	104	(50-150)		
MS1_202008200511	Perfluorononanoic acid (PFNA)	ND	0.025	0.0264	ug/L	106	(70-130)		
DUP_202008200514	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0244	ug/L	106	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0246	ug/L	106	(70-130)	30	0.82

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00195	ug/L	106	(50-150)		
MS1_202008200511	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0248	ug/L	106	(70-130)		
DUP_202008200514	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0264	ug/L	106	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0266	ug/L	106	(70-130)	30	0.76
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00219	ug/L	110	(50-150)		
MS1_202008200511	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0257	ug/L	102	(70-130)		
DUP_202008200514	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0244	ug/L	98	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0234	ug/L	93	(70-130)	30	4.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00180	ug/L	90	(50-150)		
MS1_202008200511	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0242	ug/L	97	(70-130)		
DUP_202008200514	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0244	ug/L	98	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0240	ug/L	96	(70-130)	30	1.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00180	ug/L	90	(50-150)		
MS1_202008200511	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0240	ug/L	96	(70-130)		
DUP_202008200514	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0246	ug/L	98	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0246	ug/L	99	(70-130)	30	0.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00192	ug/L	96	(50-150)		
MS1_202008200511	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0241	ug/L	96	(70-130)		

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1271276

Analysis Date: 08/27/2020

LCS1	Hexavalent chromium(Dissolved)		2	1.96	ug/L	98	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.98	ug/L	99	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0213	ug/L	107	(50-150)		
MS_202008180653	Hexavalent chromium(Dissolved)	2.6	2	4.66	ug/L	104	(90-110)		
MS_202008190825	Hexavalent chromium(Dissolved)	0.057	2	2.15	ug/L	105	(90-110)		
MS_202008190827	Hexavalent chromium(Dissolved)	0.041	2	2.11	ug/L	103	(90-110)		
MSD_202008180653	Hexavalent chromium(Dissolved)	2.6	2	4.65	ug/L	103	(90-110)	20	0.23

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202008190827	Hexavalent chromium(Dissolved)	0.041	2	2.12	ug/L	104	(90-110)	20	0.42

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1271304

Analysis Date: 08/27/2020

LCS1	Alkalinity in CaCO3 units		100	99.2	mg/L	99	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.4	mg/L	99	(90-110)	20	0.10
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.86	mg/L	93	(50-150)		
MS_202007230573	Alkalinity in CaCO3 units	220	100	280	mg/L	<b>58</b>	(80-120)		
MS_202008250093	Alkalinity in CaCO3 units	45	100	143	mg/L	98	(80-120)		
MSD_202007230573	Alkalinity in CaCO3 units	220	100	263	mg/L	<b>41</b>	(80-120)	20	6.3
MSD_202008250093	Alkalinity in CaCO3 units	45	100	143	mg/L	98	(80-120)	20	0.28

EPA Method 537.1 by EPA 537.1

Prep Batch: 1270265 Analytical Batch: 1271398

Analysis Date: 08/27/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0221	ug/L	94	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0223	ug/L	95	(70-130)	30	0.90
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00177	ug/L	94	(50-150)		
MS_202008190528	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00176	ug/L	93	(50-150)		
MSD_202008190528	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00173	ug/L	92	(50-150)	50	1.7
LCS1	13C2-PFDA (S)		100	99.0	%	99	(70-130)		
LCS2	13C2-PFDA (S)		100	95.6	%	96	(70-130)		
MBLK	13C2-PFDA (S)			96.7	%	97	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	95.0	%	95	(70-130)		
MS_202008190528	13C2-PFDA (S)		100	101	%	101	(70-130)		
MSD_202008190528	13C2-PFDA (S)		100	99.2	%	99	(70-130)		
LCS1	13C2-PFHxA (S)		100	103	%	103	(70-130)		
LCS2	13C2-PFHxA (S)		100	98.2	%	98	(70-130)		
MBLK	13C2-PFHxA (S)			99.3	%	99	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	98.1	%	98	(70-130)		
MS_202008190528	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MSD_202008190528	13C2-PFHxA (S)		100	104	%	104	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			110	%	110	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MS_202008190528	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
MSD_202008190528	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	13C3-HFPO-DA (S)		100	97.9	%	98	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	96.8	%	97	(70-130)		
MBLK	13C3-HFPO-DA (S)			93.2	%	93	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	94.8	%	95	(70-130)		
MS_202008190528	13C3-HFPO-DA (S)		100	94.7	%	95	(70-130)		
MSD_202008190528	13C3-HFPO-DA (S)		100	97.2	%	97	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	99.8	%	100	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MS_202008190528	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MSD_202008190528	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0251	ug/L	106	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0241	ug/L	102	(70-130)	30	4.1
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00205	ug/L	108	(50-150)		
MS_202008190528	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00208	ug/L	109	(50-150)		
MSD_202008190528	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00204	ug/L	107	(50-150)	50	2.0
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0236	ug/L	102	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0239	ug/L	103	(70-130)	30	0.84
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00192	ug/L	103	(50-150)		
MS_202008190528	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00196	ug/L	105	(50-150)		
MSD_202008190528	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00189	ug/L	101	(50-150)	50	3.7
LCS1	d3-NMeFOSAA (I)		100	99.9	%	100	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	97.8	%	98	(50-150)		
MBLK	d3-NMeFOSAA (I)			101	%	101	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	99.6	%	100	(50-150)		
MS_202008190528	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MSD_202008190528	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	94.1	%	94	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	97.6	%	98	(70-130)		
MBLK	d5-NEtFOSAA (S)			97.3	%	97	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	99.6	%	100	(70-130)		
MS_202008190528	d5-NEtFOSAA (S)		100	103	%	103	(70-130)		
MSD_202008190528	d5-NEtFOSAA (S)		100	104	%	104	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0249	ug/L	100	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0248	ug/L	99	(70-130)	30	0.40

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00200	ug/L	100	(50-150)		
MS_202008190528	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00200	ug/L	99	(50-150)		
MSD_202008190528	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00199	ug/L	99	(50-150)	50	0.61
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0252	ug/L	101	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0262	ug/L	105	(70-130)	30	3.9
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00224	ug/L	112	(50-150)		
MS_202008190528	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00222	ug/L	111	(50-150)		
MSD_202008190528	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00212	ug/L	106	(50-150)	50	4.4
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0259	ug/L	104	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0270	ug/L	108	(70-130)	30	4.2
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00228	ug/L	114	(50-150)		
MS_202008190528	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00231	ug/L	114	(50-150)		
MSD_202008190528	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00214	ug/L	105	(50-150)	50	7.8
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0233	ug/L	105	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0240	ug/L	108	(70-130)	30	3.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00193	ug/L	109	(50-150)		
MS_202008190528	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00210	ug/L	118	(50-150)		
MSD_202008190528	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00198	ug/L	112	(50-150)	50	5.6
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0255	ug/L	102	(70-130)	30	2.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00219	ug/L	109	(50-150)		
MS_202008190528	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00211	ug/L	104	(50-150)		
MSD_202008190528	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00211	ug/L	104	(50-150)	50	0.16
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0247	ug/L	99	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0245	ug/L	98	(70-130)	30	0.81
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00205	ug/L	103	(50-150)		
MS_202008190528	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00202	ug/L	100	(50-150)		
MSD_202008190528	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00195	ug/L	97	(50-150)	50	3.5
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0268	ug/L	107	(70-130)	30	1.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00233	ug/L	117	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 888431  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202008190528	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00226	ug/L	110	(50-150)		
MSD_202008190528	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00222	ug/L	109	(50-150)	50	1.3
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0247	ug/L	108	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0249	ug/L	109	(70-130)	30	0.81
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00203	ug/L	112	(50-150)		
MS_202008190528	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00222	ug/L	115	(50-150)		
MSD_202008190528	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00218	ug/L	113	(50-150)	50	2.0
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0259	ug/L	104	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0254	ug/L	102	(70-130)	30	2.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00216	ug/L	108	(50-150)		
MS_202008190528	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00227	ug/L	110	(50-150)		
MSD_202008190528	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00219	ug/L	106	(50-150)	50	3.7
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0269	ug/L	107	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0263	ug/L	105	(70-130)	30	2.3
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202008190528	Perfluorononanoic acid (PFNA)	ND	0.002	0.00219	ug/L	109	(50-150)		
MSD_202008190528	Perfluorononanoic acid (PFNA)	ND	0.002	0.00216	ug/L	107	(50-150)	50	1.6
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0248	ug/L	107	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0249	ug/L	108	(70-130)	30	0.40
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00205	ug/L	111	(50-150)		
MS_202008190528	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00213	ug/L	106	(50-150)		
MSD_202008190528	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00217	ug/L	108	(50-150)	50	1.8
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0267	ug/L	107	(70-130)	30	1.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00233	ug/L	117	(50-150)		
MS_202008190528	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00230	ug/L	108	(50-150)		
MSD_202008190528	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00232	ug/L	109	(50-150)	50	0.68
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0262	ug/L	105	(70-130)	30	3.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00221	ug/L	111	(50-150)		
MS_202008190528	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00218	ug/L	106	(50-150)		
MSD_202008190528	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00210	ug/L	102	(50-150)	50	3.7

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 888431  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0245	ug/L	98	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0246	ug/L	98	(70-130)	30	0.41
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00196	ug/L	98	(50-150)		
MS_202008190528	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00203	ug/L	101	(50-150)		
MSD_202008190528	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00200	ug/L	100	(50-150)	50	1.6
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0251	ug/L	100	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0253	ug/L	101	(70-130)	30	0.79
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00213	ug/L	106	(50-150)		
MS_202008190528	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00215	ug/L	107	(50-150)		
MSD_202008190528	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00210	ug/L	105	(50-150)	50	2.4

EPA Method 537.1 by EPA 537.1

Prep Batch: 1270278 Analytical Batch: 1271408

Analysis Date: 08/27/2020

DUP_202008200632	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0407	ug/L	87	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0431	ug/L	92	(70-130)	30	5.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00166	ug/L	88	(50-150)		
MS_202008200631	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00171	ug/L	91	(50-150)		
DUP_202008200632	13C2-PFDA (S)			102	%	102	(70-130)		
LCS3	13C2-PFDA (S)		100	101	%	101	(70-130)		
LCS4	13C2-PFDA (S)		100	122	%	122	(70-130)		
MBLK	13C2-PFDA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	101	%	101	(70-130)		
MS_202008200631	13C2-PFDA (S)		100	105	%	105	(70-130)		
DUP_202008200632	13C2-PFHxA (S)			107	%	107	(70-130)		
LCS3	13C2-PFHxA (S)		100	99.7	%	100	(70-130)		
LCS4	13C2-PFHxA (S)		100	121	%	121	(70-130)		
MBLK	13C2-PFHxA (S)			110	%	110	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MS_202008200631	13C2-PFHxA (S)		100	110	%	111	(70-130)		
DUP_202008200632	13C2-PFOA- IS#1 (I)			107	%	107	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			107	%	107	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 888431  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202008200631	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
DUP_202008200632	13C3-HFPO-DA (S)			102	%	102	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	96.9	%	97	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	112	%	112	(70-130)		
MBLK	13C3-HFPO-DA (S)			99.8	%	100	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	93.6	%	94	(70-130)		
MS_202008200631	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
DUP_202008200632	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	96.1	%	96	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.3	%	98	(50-150)		
MS_202008200631	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
DUP_202008200632	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0461	ug/L	95	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0465	ug/L	96	(70-130)	30	0.86
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00194	ug/L	103	(50-150)		
MS_202008200631	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00205	ug/L	108	(50-150)		
DUP_202008200632	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0459	ug/L	99	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0464	ug/L	100	(70-130)	30	1.1
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00195	ug/L	105	(50-150)		
MS_202008200631	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00181	ug/L	97	(50-150)		
DUP_202008200632	d3-NMeFOSAA (I)			100	%	100	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MBLK	d3-NMeFOSAA (I)			106	%	106	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MS_202008200631	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
DUP_202008200632	d5-NEtFOSAA (S)			103	%	103	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	95.0	%	95	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
MBLK	d5-NEtFOSAA (S)			103	%	103	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	104	%	104	(70-130)		
MS_202008200631	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
DUP_202008200632	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
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Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0467	ug/L	93	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0455	ug/L	91	(70-130)	30	2.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00194	ug/L	97	(50-150)		
MS_202008200631	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00217	ug/L	108	(50-150)		
DUP_202008200632	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0464	ug/L	93	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0466	ug/L	93	(70-130)	30	0.22
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00212	ug/L	106	(50-150)		
MS_202008200631	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00209	ug/L	103	(50-150)		
DUP_202008200632	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0489	ug/L	98	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0489	ug/L	98	(70-130)	30	0.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00214	ug/L	107	(50-150)		
MS_202008200631	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00221	ug/L	109	(50-150)		
DUP_202008200632	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0447	ug/L	101	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0455	ug/L	103	(70-130)	30	1.8
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00194	ug/L	110	(50-150)		
MS_202008200631	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00307	ug/L	108	(50-150)		
DUP_202008200632	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0499	ug/L	100	(70-130)	30	0.40
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202008200631	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00222	ug/L	103	(50-150)		
DUP_202008200632	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0460	ug/L	92	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0498	ug/L	100	(70-130)	30	7.9
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00193	ug/L	96	(50-150)		
MS_202008200631	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00198	ug/L	99	(50-150)		
DUP_202008200632	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0496	ug/L	99	(70-130)	30	0.0

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Report: 888431  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00217	ug/L	108	(50-150)		
MS_202008200631	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00228	ug/L	113	(50-150)		
DUP_202008200632	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0475	ug/L	104	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0476	ug/L	104	(70-130)	30	0.21
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00204	ug/L	112	(50-150)		
MS_202008200631	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00246	ug/L	109	(50-150)		
DUP_202008200632	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0495	ug/L	99	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0491	ug/L	98	(70-130)	30	0.81
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202008200631	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00219	ug/L	106	(50-150)		
DUP_202008200632	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0492	ug/L	98	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0500	ug/L	100	(70-130)	30	1.6
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00208	ug/L	104	(50-150)		
MS_202008200631	Perfluorononanoic acid (PFNA)	ND	0.002	0.00249	ug/L	109	(50-150)		
DUP_202008200632	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0465	ug/L	101	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0472	ug/L	102	(70-130)	30	1.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00202	ug/L	109	(50-150)		
MS_202008200631	Perfluorooctanesulfonic acid (PFOS)	0.0020	0.0019	0.00384	ug/L	101	(50-150)		
DUP_202008200632	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0500	ug/L	100	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0495	ug/L	99	(70-130)	30	1.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00223	ug/L	111	(50-150)		
MS_202008200631	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00235	ug/L	109	(50-150)		
DUP_202008200632	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0466	ug/L	93	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0488	ug/L	98	(70-130)	30	4.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00186	ug/L	93	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202008200631	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00189	ug/L	92	(50-150)		
DUP_202008200632	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0458	ug/L	92	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0492	ug/L	98	(70-130)	30	7.2
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00188	ug/L	94	(50-150)		
MS_202008200631	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00197	ug/L	98	(50-150)		
DUP_202008200632	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0463	ug/L	93	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0488	ug/L	98	(70-130)	30	5.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00199	ug/L	100	(50-150)		
MS_202008200631	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00212	ug/L	105	(50-150)		

Perchlorate by EPA 314.0

Analytical Batch: 1271723

Analysis Date: 08/28/2020

LCS1	Perchlorate		25	23.4	ug/L	94	(85-115)		
LCS2	Perchlorate		25	22.8	ug/L	91	(85-115)	15	2.6
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	3.68	ug/L	92	(75-125)		
MS_202008120353	Perchlorate	ND	25	20.7	ug/L	83	(80-120)		
MSD_202008120353	Perchlorate	ND	25	21.0	ug/L	84	(80-120)	15	1.4

EPA Method 537.1 by EPA 537.1

Prep Batch: 1271848 Analytical Batch: 1272407

Analysis Date: 09/01/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0443	ug/L	94	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0488	ug/L	104	(70-130)	30	9.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00195	ug/L	104	(50-150)		
MS2_202008270876	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0477	ug/L	101	(70-130)		
MSD2_202008270876	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0498	ug/L	106	(70-130)	30	4.3
LCS3	13C2-PFDA (S)		100	119	%	119	(70-130)		
LCS4	13C2-PFDA (S)		100	120	%	120	(70-130)		
MBLK	13C2-PFDA (S)			117	%	117	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	121	%	121	(70-130)		
MS2_202008270876	13C2-PFDA (S)		100	115	%	115	(70-130)		
MSD2_202008270876	13C2-PFDA (S)		100	118	%	118	(70-130)		
LCS3	13C2-PFHxA (S)		100	125	%	125	(70-130)		
LCS4	13C2-PFHxA (S)		100	124	%	124	(70-130)		

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFHxA (S)			114	%	114	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	118	%	118	(70-130)		
MS2_202008270876	13C2-PFHxA (S)		100	112	%	112	(70-130)		
MSD2_202008270876	13C2-PFHxA (S)		100	116	%	116	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.6	%	99	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			100	%	100	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	99.3	%	99	(50-150)		
MS2_202008270876	13C2-PFOA- IS#1 (I)		100	99.2	%	99	(50-150)		
MSD2_202008270876	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	116	%	116	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	114	%	114	(70-130)		
MBLK	13C3-HFPO-DA (S)			106	%	106	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	109	%	109	(70-130)		
MS2_202008270876	13C3-HFPO-DA (S)		100	104	%	105	(70-130)		
MSD2_202008270876	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			98.5	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	97.7	%	98	(50-150)		
MS2_202008270876	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
MSD2_202008270876	13C4-PFOS- IS#2 (I)		100	99.7	%	100	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0454	ug/L	94	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0491	ug/L	101	(70-130)	30	7.8
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00198	ug/L	105	(50-150)		
MS2_202008270876	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0473	ug/L	98	(70-130)		
MSD2_202008270876	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0474	ug/L	98	(70-130)	30	0.15
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0452	ug/L	97	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0482	ug/L	103	(70-130)	30	6.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00197	ug/L	106	(50-150)		
MS2_202008270876	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0472	ug/L	101	(70-130)		
MSD2_202008270876	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0492	ug/L	106	(70-130)	30	4.4
LCS3	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MBLK	d3-NMeFOSAA (I)			99.5	%	100	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	99.4	%	99	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202008270876	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MSD2_202008270876	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	114	%	115	(70-130)		
MBLK	d5-NEtFOSAA (S)			112	%	112	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	110	%	110	(70-130)		
MS2_202008270876	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MSD2_202008270876	d5-NEtFOSAA (S)		100	116	%	116	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0490	ug/L	98	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0526	ug/L	105	(70-130)	30	6.9
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00201	ug/L	101	(50-150)		
MS2_202008270876	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0478	ug/L	96	(70-130)		
MSD2_202008270876	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0491	ug/L	98	(70-130)	30	2.6
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0475	ug/L	95	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0524	ug/L	105	(70-130)	30	9.8
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	105	(50-150)		
MS2_202008270876	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0503	ug/L	101	(70-130)		
MSD2_202008270876	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0516	ug/L	103	(70-130)	30	2.6
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0493	ug/L	99	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0521	ug/L	104	(70-130)	30	5.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS2_202008270876	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0509	ug/L	102	(70-130)		
MSD2_202008270876	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0520	ug/L	104	(70-130)	30	2.1
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0430	ug/L	97	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0458	ug/L	104	(70-130)	30	6.3
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00173	ug/L	98	(50-150)		
MS2_202008270876	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0390	ug/L	88	(70-130)		
MSD2_202008270876	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0428	ug/L	97	(70-130)	30	9.3
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0486	ug/L	97	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0536	ug/L	107	(70-130)	30	9.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00226	ug/L	113	(50-150)		
MS2_202008270876	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0541	ug/L	108	(70-130)		
MSD2_202008270876	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0533	ug/L	107	(70-130)	30	1.5

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0537	ug/L	107	(70-130)	30	7.7
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00217	ug/L	109	(50-150)		
MS2_202008270876	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0552	ug/L	110	(70-130)		
MSD2_202008270876	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0521	ug/L	104	(70-130)	30	5.7
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0481	ug/L	96	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0514	ug/L	103	(70-130)	30	6.6
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00228	ug/L	114	(50-150)		
MS2_202008270876	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0506	ug/L	101	(70-130)		
MSD2_202008270876	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0492	ug/L	98	(70-130)	30	2.9
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0443	ug/L	97	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0474	ug/L	104	(70-130)	30	6.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00198	ug/L	108	(50-150)		
MS2_202008270876	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0471	ug/L	103	(70-130)		
MSD2_202008270876	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0477	ug/L	105	(70-130)	30	1.3
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0525	ug/L	105	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0546	ug/L	109	(70-130)	30	3.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00226	ug/L	113	(50-150)		
MS2_202008270876	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0495	ug/L	99	(70-130)		
MSD2_202008270876	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0495	ug/L	99	(70-130)	30	0.080
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0548	ug/L	110	(70-130)	30	7.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00231	ug/L	115	(50-150)		
MS2_202008270876	Perfluorononanoic acid (PFNA)	ND	0.05	0.0531	ug/L	106	(70-130)		
MSD2_202008270876	Perfluorononanoic acid (PFNA)	ND	0.05	0.0524	ug/L	105	(70-130)	30	1.3
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0445	ug/L	96	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0486	ug/L	105	(70-130)	30	8.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00203	ug/L	110	(50-150)		
MS2_202008270876	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0476	ug/L	103	(70-130)		
MSD2_202008270876	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0490	ug/L	106	(70-130)	30	2.9
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0527	ug/L	105	(70-130)	30	6.1

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 888431  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00229	ug/L	115	(50-150)		
MS2_202008270876	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0518	ug/L	103	(70-130)		
MSD2_202008270876	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0519	ug/L	103	(70-130)	30	0.26
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0478	ug/L	96	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0506	ug/L	101	(70-130)	30	5.7
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00251	ug/L	125	(50-150)		
MS2_202008270876	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0521	ug/L	104	(70-130)		
MSD2_202008270876	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0517	ug/L	103	(70-130)	30	0.72
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0515	ug/L	103	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0542	ug/L	108	(70-130)	30	5.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00225	ug/L	112	(50-150)		
MS2_202008270876	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0551	ug/L	110	(70-130)		
MSD2_202008270876	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0544	ug/L	109	(70-130)	30	1.3
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0530	ug/L	106	(70-130)	30	6.6
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00208	ug/L	104	(50-150)		
MS2_202008270876	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0529	ug/L	106	(70-130)		
MSD2_202008270876	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0530	ug/L	106	(70-130)	30	0.24

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 09/04/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 09/04/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 09/04/2020

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**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for  
Presence or Absence, Quantification of Total Coliform and E. Coli  
By Quantitray**

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 09/04/2020

Quant Report - Page 1 of 1

, Tel Fax

## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-36626-1  
Client Project/Site: 888431

For:  
Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:  
8/26/2020 11:30:17 AM

Lori Thompson, Project Manager I  
(714)895-5494  
[Lori.Thompson@eurofinset.com](mailto:Lori.Thompson@eurofinset.com)

### LINKS

Review your project  
results through  
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*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 888431

Job ID: 570-36626-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⊠	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 888431

Job ID: 570-36626-1

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**Job ID: 570-36626-1**

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**Laboratory: Eurofins Calscience LLC**

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**Narrative**

**Job Narrative**  
**570-36626-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 8/24/2020 10:58 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.5° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-90243. LCS/LCSD were performed to meet QC requirements.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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# Detection Summary

Client: Eurofins Eaton Analytical  
Project/Site: 888431

Job ID: 570-36626-1

---

**Client Sample ID: 202008200220**

**Lab Sample ID: 570-36626-1**

No Detections.

---

**Client Sample ID: 202008200236**

**Lab Sample ID: 570-36626-2**

No Detections.

- 1
- 2
- 3
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- 8
- 9
- 10
- 11
- 12
- 13
- 14

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 888431

Job ID: 570-36626-1

## General Chemistry

**Client Sample ID: 202008200220**

**Date Collected: 08/20/20 08:57**

**Date Received: 08/24/20 10:58**

**Lab Sample ID: 570-36626-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.954	0.763	mg/L		08/25/20 14:54	08/25/20 14:54	1

**Client Sample ID: 202008200236**

**Date Collected: 08/20/20 10:57**

**Date Received: 08/24/20 10:58**

**Lab Sample ID: 570-36626-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.966	0.773	mg/L		08/25/20 14:54	08/25/20 14:54	1



# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 888431

Job ID: 570-36626-1

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 570-90243/1-A**  
**Matrix: Water**  
**Analysis Batch: 90279**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 90243**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		08/25/20 14:54	08/25/20 14:54	1

**Lab Sample ID: LCS 570-90243/2-A**  
**Matrix: Water**  
**Analysis Batch: 90279**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 90243**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	37.10		mg/L		93	78 - 114

**Lab Sample ID: LCSD 570-90243/3-A**  
**Matrix: Water**  
**Analysis Batch: 90279**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 90243**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	36.80		mg/L		92	78 - 114	1	18

# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 888431

Job ID: 570-36626-1

## General Chemistry

### Prep Batch: 90243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-36626-1	202008200220	Total/NA	Water	1664A	
570-36626-2	202008200236	Total/NA	Water	1664A	
MB 570-90243/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-90243/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-90243/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

### Analysis Batch: 90279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-36626-1	202008200220	Total/NA	Water	1664A	90243
570-36626-2	202008200236	Total/NA	Water	1664A	90243
MB 570-90243/1-A	Method Blank	Total/NA	Water	1664A	90243
LCS 570-90243/2-A	Lab Control Sample	Total/NA	Water	1664A	90243
LCSD 570-90243/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	90243

# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 888431

Job ID: 570-36626-1

**Client Sample ID: 202008200220**

**Lab Sample ID: 570-36626-1**

**Date Collected: 08/20/20 08:57**

**Matrix: Water**

**Date Received: 08/24/20 10:58**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1048 mL	1000 mL	90243	08/25/20 14:54	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			90279	08/25/20 14:54	UWEZ	ECL 1

Instrument ID: NOEQUIP

**Client Sample ID: 202008200236**

**Lab Sample ID: 570-36626-2**

**Date Collected: 08/20/20 10:57**

**Matrix: Water**

**Date Received: 08/24/20 10:58**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1035 mL	1000 mL	90243	08/25/20 14:54	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			90279	08/25/20 14:54	UWEZ	ECL 1

Instrument ID: NOEQUIP

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 888431

Job ID: 570-36626-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

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# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 888431

Job ID: 570-36626-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

**Protocol References:**

1664A = EPA-821-98-002

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 888431

Job ID: 570-36626-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-36626-1	202008200220	Water	08/20/20 08:57	08/24/20 10:58	
570-36626-2	202008200236	Water	08/20/20 10:57	08/24/20 10:58	

---

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36626  
Date: 8/24/2020

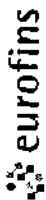
### Submittal Form

**\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!**  
Report & Invoice must have the Folder # 888431 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report.  
Results must have Complete data & QC with Approval Signature.

Reports: Jackie Contreras Sub-Contracting Administrator  
EMAIL TO: us20\_subcontract@eurofinsus.com  
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
Phone (626) 386-1165 Fax (626) 386-1122  
Invoices to: Eurofins Eaton Analytical, LLC  
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the  
Specified State Certification # and  
Exp Date for requested tests + matrix.  
Samples from: CALIFORNIA



Eaton Analytical

Ship To:  
Eurofins CalScience  
7440 Lincoln Way  
Garden Grove, CA 92641-1432  
Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 888431  
Report Due: 09/03/2020

Sample ID: 202008200220 Client Sample ID for reference onl  
LH-INF-20200820 PWS Systemcode PWSID JLS

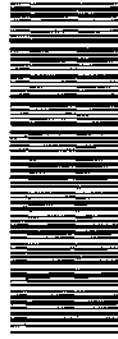
Sample type: Oil and Grease by 1664(subbed) Facility ID: Sample Point ID: Static ID:

Method: EPA 1664  
Prep Method: Analysis Requested  
Oil and Grease by 1664(subbed)

Sample ID: 202008200236 Client Sample ID for reference onl  
MB-INF-20200820 PWS Systemcode PWSID JLS

Sample type: Oil and Grease by 1664(subbed) Facility ID: Sample Point ID: Static ID:

Method: EPA 1664  
Prep Method: Analysis Requested  
Oil and Grease by 1664(subbed)



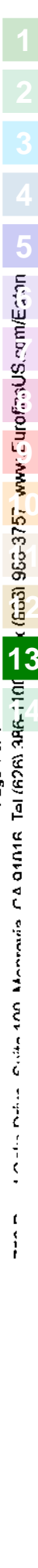
570-36626 Chain of Custody

Relinquished by: [Signature] Date: 8/24/20 Time: 1058  
Received by: [Signature] Date: 8/24/2024 Time: 1057  
Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgment of Receipt is requested to attn: Jackie Contreras

1.9/15 54



# Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-36626-1

**Login Number: 36626**  
**List Number: 1**  
**Creator: Soriano, Precy**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 889747  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

### STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>-2</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 889747  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **August 27, 2020 at 1133**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202008270372</u>	GAC-1M-20200827 Static ID: 537.1 @537.1	08/27/2020 0733
<u>202008270373</u>	GAC-2M-20200827 Static ID: 537.1 @537.1	08/27/2020 0736
<u>202008270374</u>	GAC-3M-20200827 Static ID: 537.1 @537.1	08/27/2020 0739
<u>202008270375</u>	GAC-4M-20200827 Static ID: 537.1 @537.1	08/27/2020 0742
<u>202008270376</u>	IX-1M-20200827 Static ID: 537.1 @537.1	08/27/2020 0745
<u>202008270377</u>	IX-2M-20200827 Static ID: 537.1 @537.1	08/27/2020 0748
<u>202008270378</u>	IX-3M-20200827 Static ID: 537.1 @537.1	08/27/2020 0751
<u>202008270379</u>	IX-4M-20200827 Static ID: 537.1 @537.1	08/27/2020 0754
<u>202008270380</u>	LH-INF-20200827 Static ID: 537.1 @537.1	08/27/2020 0757
	Chloride @ANIONS48 Alkalinity in CaCO3 units	
	Sulfate Total Organic Carbon	
<u>202008270381</u>	LH-INF-DUP-20200827 Static ID: 537.1 @537.1	08/27/2020 0800
<u>202008270382</u>	GAC-5M-20200827	08/27/2020 0933

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 889747  
Project: 0250000  
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

The following samples were received from you on **August 27, 2020 at 1133**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	Static ID: 537.1	
	@537.1	
<u>202008270383</u>	GAC-6M-20200827	08/27/2020 0936
	Static ID: 537.1	
	@537.1	
<u>202008270384</u>	GAC-7M-20200827	08/27/2020 0939
	Static ID: 537.1	
	@537.1	
<u>202008270385</u>	GAC-8M-20200827	08/27/2020 0942
	Static ID: 537.1	
	@537.1	
<u>202008270386</u>	IX-5M-20200827	08/27/2020 0945
	Static ID: 537.1	
	@537.1	
<u>202008270387</u>	IX-6M-20200827	08/27/2020 0948
	Static ID: 537.1	
	@537.1	
<u>202008270388</u>	IX-7M-20200827	08/27/2020 0951
	Static ID: 537.1	
	@537.1	
<u>202008270389</u>	IX-8M-20200827	08/27/2020 0954
	Static ID: 537.1	
	@537.1	
<u>202008270392</u>	MB-INF-20200827	08/27/2020 0957
	@537.1	
	Chloride	@ANIONS48 Alkalinity in CaCO3 units
		Sulfate Total Organic Carbon
<u>202008270395</u>	FB-HOLD-20200827	08/27/2020 1000
	@537.1 FB	

#### Test Description

@537.1 -- EPA Method 537.1

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 889747  
Project: 0250000  
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

---

The following samples were received from you on **August 27, 2020 at 1133**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

---

Sample #	Sample ID	Sample Date
	@537.1 FB -- EPA Method 537.1	
	@ANIONS48 -- Nitrate, Nitrite by EPA 300.0	

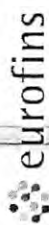
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89747

<b>FROM:</b> GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com LABORATORY: Eurofins Eaton Analytical		<b>PROJECT NAME:</b> WRD Pilot <b>PROJECT CONTACT:</b> Miae Jeon <b>GLOBAL ID:</b>		<b>PROJECT NO.:</b> 5302 <b>LAB CONTACT:</b> Sophia Liang <b>SAMPLER(S) (PRINT):</b> RDT									
<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.													
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results											
LAB USE ONLY	SAMPLE ID	SAMPLING TIME		MATRIX	NO. OF CONT.	PRESERVATION			PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	
		DATE	TIME			Unpreserved	Preserved	Field Filtered					
	IX-5 M-20200827	8-27	0945	Water	2		2		X				
	IX-6 M-20200827	8-27	0948	Water	2		2		X				
	IX-7 M-20200827	8-27	0951	Water	2		2		X				
	IX-8 M-20200827	8-27	0954	Water	2		2		X				
	MB-INF-20200827	8-27	0957	Water	5		2	3	X				
	MB-INF-DUP			Water	1		1						
	FB <del>M-20200827</del>	8-27	1000	Water	1								
Relinquished by: (Signature) <i>Gunn Santa</i>						Received by: (Signature) <i>[Signature]</i>	Date: <u>8/27</u>	Time: <u>11:33</u>					
Relinquished by: (Signature)						Received by: (Signature)	Date:	Time:					
Relinquished by: (Signature)						Received by: (Signature)	Date:	Time:					





Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 889747

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 6309 (Observation = 3.4 °C) (Corr. Factor 0.2 °C) (Final = 3.2 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) **Chemistry:** >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) **Microbiology, Distribution:** < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) **Microbiology, Surface Water:** < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)

4) **Dioxin (1613 or 2,3,7,8 TCDD):** must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) **pH Check.** Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) **Chlorine check.** Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

7) **VOA and Radon Headspace:**  No Samples with Headspace:  Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Sample ID	Bottle #	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY:	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
		FLORENT GUILLET	Eurofins Eaton Analytical	8-27-70	135

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202008270376      <u>IX-1M-20200827</u></b>						
08/31/2020 19:22	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
08/31/2020 19:22	Perfluorooctanoic acid (PFOA)		0.0048		ug/L	0.0020
<b>202008270377      <u>IX-2M-20200827</u></b>						
08/31/2020 19:41	Perfluorohexanoic acid (PFHxA)		0.0026		ug/L	0.0020
08/31/2020 19:41	Perfluorooctanoic acid (PFOA)		0.0045		ug/L	0.0020
<b>202008270378      <u>IX-3M-20200827</u></b>						
08/31/2020 21:48	Perfluorohexanoic acid (PFHxA)		0.0022		ug/L	0.0020
08/31/2020 21:48	Perfluorooctanoic acid (PFOA)		0.0044		ug/L	0.0020
<b>202008270379      <u>IX-4M-20200827</u></b>						
08/31/2020 21:57	Perfluorohexanoic acid (PFHxA)		0.0022		ug/L	0.0020
08/31/2020 21:57	Perfluorooctanoic acid (PFOA)		0.0038		ug/L	0.0020
<b>202008270380      <u>LH-INF-20200827</u></b>						
08/29/2020 01:02	Alkalinity in CaCO3 units		200		mg/L	2.0
08/27/2020 19:37	Chloride		110	250	mg/L	2.5
08/27/2020 19:37	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
08/27/2020 19:37	Nitrate as NO3 (calc)		12	45	mg/L	2.2
08/31/2020 22:07	Perfluorobutanesulfonic acid (PFBS)		0.0062		ug/L	0.0020
08/31/2020 22:07	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
08/31/2020 22:07	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
08/31/2020 22:07	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
08/31/2020 22:07	Perfluorooctanesulfonic acid (PFOS)		0.033		ug/L	0.0020
08/31/2020 22:07	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
08/27/2020 19:37	Sulfate		180	250	mg/L	2.5
08/27/2020 19:37	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
09/04/2020 19:12	Total Organic Carbon		0.74		mg/L	0.20
<b>202008270381      <u>LH-INF-DUP-20200827</u></b>						
08/31/2020 22:17	Perfluorobutanesulfonic acid (PFBS)		0.0062		ug/L	0.0020
08/31/2020 22:17	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
08/31/2020 22:17	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
08/31/2020 22:17	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
08/31/2020 22:17	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
08/31/2020 22:17	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
<b>202008270382      <u>GAC-5M-20200827</u></b>						

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
08/31/2020 22:26	Perfluorobutanesulfonic acid (PFBS)		0.0068		ug/L	0.0020
08/31/2020 22:26	Perfluoroheptanoic acid (PFHpA)		0.0027		ug/L	0.0020
08/31/2020 22:26	Perfluorohexanesulfonic acid (PFHxS)		0.0020		ug/L	0.0020
08/31/2020 22:26	Perfluorohexanoic acid (PFHxA)		0.0052		ug/L	0.0020
08/31/2020 22:26	Perfluorooctanesulfonic acid (PFOS)		0.0066		ug/L	0.0020
08/31/2020 22:26	Perfluorooctanoic acid (PFOA)		0.0076		ug/L	0.0020
		<b>202008270383</b>	<b><u>GAC-6M-20200827</u></b>			
08/31/2020 22:36	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
08/31/2020 22:36	Perfluoroheptanoic acid (PFHpA)		0.0024		ug/L	0.0020
08/31/2020 22:36	Perfluorohexanoic acid (PFHxA)		0.0061		ug/L	0.0020
08/31/2020 22:36	Perfluorooctanoic acid (PFOA)		0.0030		ug/L	0.0020
		<b>202008270384</b>	<b><u>GAC-7M-20200827</u></b>			
09/01/2020 01:31	Perfluorobutanesulfonic acid (PFBS)		0.0083		ug/L	0.0020
09/01/2020 01:31	Perfluoroheptanoic acid (PFHpA)		0.0027		ug/L	0.0020
09/01/2020 01:31	Perfluorohexanesulfonic acid (PFHxS)		0.0025		ug/L	0.0020
09/01/2020 01:31	Perfluorohexanoic acid (PFHxA)		0.0052		ug/L	0.0020
09/01/2020 01:31	Perfluorooctanesulfonic acid (PFOS)		0.0051		ug/L	0.0020
09/01/2020 01:31	Perfluorooctanoic acid (PFOA)		0.0072		ug/L	0.0020
		<b>202008270385</b>	<b><u>GAC-8M-20200827</u></b>			
09/01/2020 01:40	Perfluorobutanesulfonic acid (PFBS)		0.0050		ug/L	0.0020
09/01/2020 01:40	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
09/01/2020 01:40	Perfluorooctanesulfonic acid (PFOS)		0.0048		ug/L	0.0020
09/01/2020 01:40	Perfluorooctanoic acid (PFOA)		0.0047		ug/L	0.0020
		<b>202008270386</b>	<b><u>IX-5M-20200827</u></b>			
09/01/2020 18:11	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
09/01/2020 18:11	Perfluorooctanoic acid (PFOA)		0.0046		ug/L	0.0020
		<b>202008270387</b>	<b><u>IX-6M-20200827</u></b>			
09/01/2020 18:32	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
09/01/2020 18:32	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
09/01/2020 18:32	Perfluorooctanoic acid (PFOA)		0.0063		ug/L	0.0020
		<b>202008270388</b>	<b><u>IX-7M-20200827</u></b>			
09/01/2020 18:43	Perfluoroheptanoic acid (PFHpA)		0.0030		ug/L	0.0020
09/01/2020 18:43	Perfluorohexanoic acid (PFHxA)		0.0050		ug/L	0.0020
09/01/2020 18:43	Perfluorooctanoic acid (PFOA)		0.0075		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	<b>202008270389</b>	<b><u>IX-8M-20200827</u></b>				
09/01/2020 18:52	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
09/01/2020 18:52	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
09/01/2020 18:52	Perfluorooctanoic acid (PFOA)		0.0052		ug/L	0.0020
	<b>202008270392</b>	<b><u>MB-INF-20200827</u></b>				
08/29/2020 00:55	Alkalinity in CaCO3 units		170		mg/L	2.0
08/27/2020 20:16	Chloride		48	250	mg/L	2.5
08/27/2020 20:16	Nitrate as Nitrogen by IC		2.6	10	mg/L	0.50
08/27/2020 20:16	Nitrate as NO3 (calc)		11	45	mg/L	2.2
09/01/2020 19:02	Perfluorobutanesulfonic acid (PFBS)		0.0092		ug/L	0.0020
09/01/2020 19:02	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
09/01/2020 19:02	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
09/01/2020 19:02	Perfluorohexanoic acid (PFHxA)		0.0055		ug/L	0.0020
09/01/2020 19:02	Perfluorononanoic acid (PFNA)		0.0034		ug/L	0.0020
09/01/2020 19:02	Perfluorooctanesulfonic acid (PFOS)		0.036		ug/L	0.0020
09/01/2020 19:02	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
08/27/2020 20:16	Sulfate		77	250	mg/L	2.5
08/27/2020 20:16	Total Nitrate, Nitrite-N, CALC		2.6		mg/L	0.10
09/04/2020 19:34	Total Organic Carbon		0.80		mg/L	0.20

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1M-20200827 (202008270372)</b>					<b>Sampled on 08/27/2020 0733</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	13C2-PFDA	105	%		1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	13C2-PFHxA	101	%		1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	94	%		1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	96	%		1

<b>GAC-2M-20200827 (202008270373)</b>					<b>Sampled on 08/27/2020 0736</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	13C2-PFDA	101	%		1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	13C2-PFHxA	98	%		1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	95	%		1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	106	%		1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**GAC-3M-20200827 (202008270374)**

Sampled on 08/27/2020 0739

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	13C2-PFDA	101	%		1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	13C2-PFHxA	100	%		1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	93	%		1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	96	%		1

**GAC-4M-20200827 (202008270375)**

Sampled on 08/27/2020 0742

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	13C2-PFDA	100	%		1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	13C2-PFHxA	98	%		1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	91	%		1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**IX-1M-20200827 (202008270376)**

Static ID: 537.1

Sampled on 08/27/2020 0745

**EPA 537.1 - EPA Method 537.1**

08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0048	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	13C2-PFDA	105	%		1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	13C2-PFHxA	101	%		1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	98	%		1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	103	%		1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	100	%		1

**IX-2M-20200827 (202008270377)**

**Sampled on 08/27/2020 0748**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0026	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0045	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	13C2-PFDA	107	%		1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	13C2-PFHxA	101	%		1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	96	%		1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	107	%		1

Rounding on totals after summation.  
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Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	99	%		1
<b>IX-3M-20200827 (202008270378)</b>						<b>Sampled on 08/27/2020 0751</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0022	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0044	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	13C2-PFDA	103	%		1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	13C2-PFHxA	98	%		1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	93	%		1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	106	%		1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	94	%		1

**IX-4M-20200827 (202008270379)**

**Sampled on 08/27/2020 0754**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0022	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0038	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	13C2-PFDA	105	%		1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	13C2-PFHxA	99	%		1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	97	%		1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**LH-INF-20200827 (202008270380)**

**Sampled on 08/27/2020 0757**

Static ID: 537.1

**SM 5310C - Total Organic Carbon**

09/04/20 19:12	1272641	(SM 5310C)	Total Organic Carbon	0.74	mg/L	0.20	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

08/27/20 19:37	1271284	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
08/27/20 19:37	1271284	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
08/27/20 19:37	1271284	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
08/27/20 19:37	1271284	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

08/27/20 19:37	1271283	(EPA 300.0)	Chloride	110	mg/L	2.5	5
08/27/20 19:37	1271283	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

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Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0062	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.033	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	13C2-PFDA	102	%		1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	13C2-PFHxA	99	%		1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	95	%		1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	108	%		1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**SM 2320B - Alkalinity in CaCO3 units**

08/29/20 01:02	1271602	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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**LH-INF-DUP-20200827 (202008270381)**

Sampled on 08/27/2020 0800

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0062	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	13C2-PFDA	106	%		1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	13C2-PFHxA	100	%		1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	93	%		1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**GAC-5M-20200827 (202008270382)**

Sampled on 08/27/2020 0933

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0068	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

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Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0027	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0020	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0052	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0066	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0076	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	13C2-PFDA	107	%		1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	13C2-PFHxA	101	%		1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	97	%		1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	110	%		1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	100	%		1

**GAC-6M-20200827 (202008270383)**

Sampled on 08/27/2020 0936

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0024	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0061	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

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Report: 889747  
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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0030	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	13C2-PFDA	106	%		1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	13C2-PFHxA	99	%		1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	93	%		1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	106	%		1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	100	%		1

**GAC-7M-20200827 (202008270384)**

Sampled on 08/27/2020 0939

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0083	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0027	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0025	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0052	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0051	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0072	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	13C2-PFDA	116	%		1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	13C2-PFHxA	108	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	13C3-HFPO-DA	104	%		1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	d5-NEtFOSAA	108	%		1
<b><u>GAC-8M-20200827 (202008270385)</u></b>					<b>Sampled on 08/27/2020 0942</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0050	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0048	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0047	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	13C2-PFDA	117	%		1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	13C2-PFHxA	112	%		1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	13C3-HFPO-DA	107	%		1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	d3-NMeFOSAA	108	%		1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**IX-5M-20200827 (202008270386)**

**Sampled on 08/27/2020 0945**

Static ID: 537.1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 537.1 - EPA Method 537.1</b>									
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0046	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	13C2-PFDA	121	%		1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	13C2-PFHxA	122	%		1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	13C3-HFPO-DA	114	%		1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	d3-NMeFOSAA	106	%		1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	d5-NEtFOSAA	117	%		1

**IX-6M-20200827 (202008270387)**

**Sampled on 08/27/2020 0948**

Static ID: 537.1

<b>EPA 537.1 - EPA Method 537.1</b>									
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0063	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	13C2-PFDA	118	%		1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	13C2-PFHxA	115	%		1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	13C3-HFPO-DA	112	%		1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	d5-NEtFOSAA	116	%		1

**IX-7M-20200827 (202008270388)**

Sampled on 08/27/2020 0951

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0030	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0050	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0075	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	13C2-PFDA	124	%		1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	13C2-PFHxA	117	%		1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	13C3-HFPO-DA	112	%		1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	d5-NEtFOSAA	116	%		1

**IX-8M-20200827 (202008270389)**

Sampled on 08/27/2020 0954

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0052	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	13C2-PFDA	121	%		1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	13C2-PFHxA	117	%		1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	13C3-HFPO-DA	112	%		1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	d3-NMeFOSAA	108	%		1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	d5-NEtFOSAA	116	%		1

**MB-INF-20200827 (202008270392)**

Sampled on 08/27/2020 0957

**SM 5310C - Total Organic Carbon**

09/04/20 19:34		1272641	(SM 5310C)	Total Organic Carbon	0.80	mg/L	0.20	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

08/27/20 20:16		1271284	(EPA 300.0)	Nitrate as Nitrogen by IC	2.6	mg/L	0.50	5
08/27/20 20:16		1271284	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
08/27/20 20:16		1271284	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
08/27/20 20:16		1271284	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.6	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

08/27/20 20:16		1271283	(EPA 300.0)	Chloride	48	mg/L	2.5	5
08/27/20 20:16		1271283	(EPA 300.0)	Sulfate	77	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0092	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0055	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0034	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.036	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	13C2-PFDA	111	%		1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	13C2-PFHxA	113	%		1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	13C3-HFPO-DA	106	%		1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	d3-NMeFOSAA	108	%		1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	d5-NEtFOSAA	109	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	08/29/20 00:55		1271602	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1

**FB-HOLD-20200827 (202008270395)**

Sampled on 08/27/2020 1000

**EPA 537.1 - EPA Method 537.1**

09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

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 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	13C2-PFDA	103	%		1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	13C2-PFHxA	102	%		1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	13C3-HFPO-DA	99	%		1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	d3-NMeFOSAA	102	%		1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	d5-NEtFOSAA	101	%		1

Rounding on totals after summation.  
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**Report:** 889747  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1271283**

202008270380 LH-INF-20200827  
 202008270392 MB-INF-20200827

**Analysis Date: 08/27/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1271284**

202008270380 LH-INF-20200827  
 202008270392 MB-INF-20200827

**Analysis Date: 08/27/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Alkalinity in CaCO3 units**

**Analytical Batch: 1271602**

202008270380 LH-INF-20200827  
 202008270392 MB-INF-20200827

**Analysis Date: 08/29/2020**

Analyzed by: ZS6I  
 Analyzed by: ZS6I

**EPA Method 537.1**

**Prep Batch: 1271390 Analytical Batch: 1272045**

202008270372 GAC-1M-20200827  
 202008270373 GAC-2M-20200827  
 202008270374 GAC-3M-20200827  
 202008270375 GAC-4M-20200827  
 202008270376 IX-1M-20200827  
 202008270377 IX-2M-20200827  
 202008270378 IX-3M-20200827  
 202008270379 IX-4M-20200827  
 202008270380 LH-INF-20200827  
 202008270381 LH-INF-DUP-20200827  
 202008270382 GAC-5M-20200827  
 202008270383 GAC-6M-20200827

**Analysis Date: 08/31/2020**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM

**EPA Method 537.1**

**Prep Batch: 1271540 Analytical Batch: 1272049**

202008270384 GAC-7M-20200827  
 202008270385 GAC-8M-20200827

**Analysis Date: 09/01/2020**

Analyzed by: KAM  
 Analyzed by: KAM

**EPA Method 537.1**

**Prep Batch: 1271848 Analytical Batch: 1272407**

202008270386 IX-5M-20200827  
 202008270387 IX-6M-20200827  
 202008270388 IX-7M-20200827  
 202008270389 IX-8M-20200827  
 202008270392 MB-INF-20200827

**Analysis Date: 09/01/2020**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM

**Total Organic Carbon**

**Analytical Batch: 1272641**

202008270380 LH-INF-20200827  
 202008270392 MB-INF-20200827

**Analysis Date: 09/04/2020**

Analyzed by: ZB2Z  
 Analyzed by: ZB2Z

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Report:** 889747  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

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**EPA Method 537.1**

**Prep Batch: 1272516   Analytical Batch: 1273300**  
202008270395                      FB-HOLD-20200827

**Analysis Date: 09/04/2020**  
Analyzed by: KAM



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1271283</b>					<b>Analysis Date: 08/27/2020</b>				
LCS1	Chloride		25	26.9	mg/L	108	(90-110)		
LCS2	Chloride		25	26.9	mg/L	108	(90-110)	20	0.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.447	mg/L	89	(50-150)		
MS_202008270380	Chloride	110	65	178	mg/L	110	(80-120)		
MS_202008270842	Chloride	300	130	426	mg/L	103	(80-120)		
MSD_202008270380	Chloride	110	65	178	mg/L	110	(80-120)	20	0.14
MSD_202008270842	Chloride	300	130	429	mg/L	105	(80-120)	20	0.63
LCS1	Sulfate		50	52.8	mg/L	106	(90-110)		
LCS2	Sulfate		50	52.8	mg/L	106	(90-110)	20	0.0
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.969	mg/L	97	(50-150)		
MRLLW	Sulfate		0.25	0.234	mg/L	94	(50-150)		
MS_202008270380	Sulfate	180	125	316	mg/L	110	(80-120)		
MS_202008270842	Sulfate	200	250	478	mg/L	111	(80-120)		
MSD_202008270380	Sulfate	180	125	317	mg/L	110	(80-120)	20	0.15
MSD_202008270842	Sulfate	200	250	482	mg/L	113	(80-120)	20	0.85
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1271284</b>					<b>Analysis Date: 08/27/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.57	mg/L	103	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.58	mg/L	103	(90-110)	20	0.39
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0459	mg/L	92	(50-150)		
MRLLW	Nitrate as Nitrogen by IC		0.013	0.0109	mg/L	87	(50-150)		
MS_202008270380	Nitrate as Nitrogen by IC	2.8	6.5	9.51	mg/L	107	(80-120)		
MS_202008270842	Nitrate as Nitrogen by IC	31	13	44.2	mg/L	107	(80-120)		
MSD_202008270380	Nitrate as Nitrogen by IC	2.8	6.5	9.53	mg/L	108	(80-120)	20	0.17
MSD_202008270842	Nitrate as Nitrogen by IC	31	13	44.5	mg/L	110	(80-120)	20	0.60
LCS1	Nitrite Nitrogen by IC		1	1.01	mg/L	101	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.01	mg/L	101	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0455	mg/L	91	(50-150)		
MRLLW	Nitrite Nitrogen by IC		0.013	0.0123	mg/L	98	(50-150)		
MS_202008270380	Nitrite Nitrogen by IC	ND	2.5	2.47	mg/L	99	(80-120)		

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Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202008270842	Nitrite Nitrogen by IC	ND	5	4.94	mg/L	99	(80-120)		
MSD_202008270380	Nitrite Nitrogen by IC	ND	2.5	2.47	mg/L	99	(80-120)	20	0.045
MSD_202008270842	Nitrite Nitrogen by IC	ND	5	4.98	mg/L	100	(80-120)	20	0.98

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1271602

Analysis Date: 08/28/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Alkalinity in CaCO3 units		100	100	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	100	mg/L	100	(90-110)	20	0.0
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.85	mg/L	93	(50-150)		
MS_202008260519	Alkalinity in CaCO3 units	160	100	204	mg/L	<u>41</u>	(80-120)		
MS_202008260522	Alkalinity in CaCO3 units	280	100	314	mg/L	<u>32</u>	(80-120)		
MSD_202008260519	Alkalinity in CaCO3 units	160	100	200	mg/L	<u>37</u>	(80-120)	20	2.1
MSD_202008260522	Alkalinity in CaCO3 units	280	100	311	mg/L	<u>30</u>	(80-120)	20	0.81

EPA Method 537.1 by EPA 537.1

Prep Batch: 1271390 Analytical Batch: 1272045

Analysis Date: 08/31/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008270377	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0487	ug/L	103	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0482	ug/L	102	(70-130)	30	1.0
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00203	ug/L	108	(50-150)		
MS_202008270376	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00210	ug/L	112	(50-150)		
DUP_202008270377	13C2-PFDA (S)			103	%	103	(70-130)		
LCS3	13C2-PFDA (S)		100	104	%	104	(70-130)		
LCS4	13C2-PFDA (S)		100	104	%	104	(70-130)		
MBLK	13C2-PFDA (S)			105	%	105	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	103	%	103	(70-130)		
MS_202008270376	13C2-PFDA (S)		100	105	%	105	(70-130)		
DUP_202008270377	13C2-PFHxA (S)			99.4	%	99	(70-130)		
LCS3	13C2-PFHxA (S)		100	103	%	103	(70-130)		
LCS4	13C2-PFHxA (S)		100	104	%	104	(70-130)		
MBLK	13C2-PFHxA (S)			100	%	100	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MS_202008270376	13C2-PFHxA (S)		100	101	%	101	(70-130)		
DUP_202008270377	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.7	%	99	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	98.0	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			98.3	%	98	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MS_202008270376	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
DUP_202008270377	13C3-HFPO-DA (S)			97.8	%	98	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	96.0	%	96	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	94.0	%	94	(70-130)		
MBLK	13C3-HFPO-DA (S)			95.8	%	96	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	91.0	%	91	(70-130)		
MS_202008270376	13C3-HFPO-DA (S)		100	98.1	%	98	(70-130)		
DUP_202008270377	13C4-PFOS- IS#2 (I)			99.0	%	99	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	98.6	%	99	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	98.6	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			96.1	%	96	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.1	%	98	(50-150)		
MS_202008270376	13C4-PFOS- IS#2 (I)		100	97.3	%	97	(50-150)		
DUP_202008270377	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0493	ug/L	102	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0496	ug/L	102	(70-130)	30	0.61
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00198	ug/L	105	(50-150)		
MS_202008270376	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00218	ug/L	115	(50-150)		
DUP_202008270377	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0464	ug/L	100	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0459	ug/L	99	(70-130)	30	1.1
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00194	ug/L	104	(50-150)		
MS_202008270376	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00197	ug/L	106	(50-150)		
DUP_202008270377	d3-NMeFOSAA (I)			107	%	107	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MBLK	d3-NMeFOSAA (I)			101	%	101	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MS_202008270376	d3-NMeFOSAA (I)		100	106	%	107	(50-150)		
DUP_202008270377	d5-NEtFOSAA (S)			92.7	%	93	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	95.1	%	95	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	97.4	%	97	(70-130)		
MBLK	d5-NEtFOSAA (S)			96.6	%	97	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	96.9	%	97	(70-130)		
MS_202008270376	d5-NEtFOSAA (S)		100	96.2	%	96	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008270377	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0498	ug/L	100	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0496	ug/L	99	(70-130)	30	0.40
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00194	ug/L	97	(50-150)		
MS_202008270376	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00219	ug/L	110	(50-150)		
DUP_202008270377	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0490	ug/L	98	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0504	ug/L	101	(70-130)	30	2.8
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	108	(50-150)		
MS_202008270376	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00212	ug/L	106	(50-150)		
DUP_202008270377	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0492	ug/L	98	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0507	ug/L	101	(70-130)	30	3.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	108	(50-150)		
MS_202008270376	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00213	ug/L	106	(50-150)		
DUP_202008270377	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0469	ug/L	106	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0454	ug/L	103	(70-130)	30	3.3
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00194	ug/L	109	(50-150)		
MS_202008270376	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00250	ug/L	97	(50-150)		
DUP_202008270377	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0525	ug/L	105	(70-130)	30	1.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00225	ug/L	112	(50-150)		
MS_202008270376	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00257	ug/L	115	(50-150)		
DUP_202008270377	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0502	ug/L	100	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0511	ug/L	102	(70-130)	30	1.8
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00204	ug/L	102	(50-150)		
MS_202008270376	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00201	ug/L	100	(50-150)		
DUP_202008270377	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0529	ug/L	106	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0530	ug/L	106	(70-130)	30	0.19
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00229	ug/L	114	(50-150)		
MS_202008270376	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00319	ug/L	115	(50-150)		
DUP_202008270377	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0470	ug/L	103	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0478	ug/L	105	(70-130)	30	1.7
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00200	ug/L	110	(50-150)		
MS_202008270376	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00249	ug/L	114	(50-150)		
DUP_202008270377	Perfluorohexanoic acid (PFHxA)	0.0026		0.00261	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0527	ug/L	105	(70-130)	30	0.57
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00217	ug/L	109	(50-150)		
MS_202008270376	Perfluorohexanoic acid (PFHxA)	0.0020	0.002	0.00409	ug/L	102	(50-150)		
DUP_202008270377	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0553	ug/L	111	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0551	ug/L	110	(70-130)	30	0.36
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202008270376	Perfluorononanoic acid (PFNA)	ND	0.002	0.00326	ug/L	119	(50-150)		
DUP_202008270377	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0492	ug/L	106	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0483	ug/L	104	(70-130)	30	1.9
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00208	ug/L	113	(50-150)		
MS_202008270376	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00368	ug/L	107	(50-150)		
DUP_202008270377	Perfluorooctanoic acid (PFOA)	0.0045		0.00445	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0540	ug/L	108	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0536	ug/L	107	(70-130)	30	0.74
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202008270376	Perfluorooctanoic acid (PFOA)	0.0048	0.002	0.00711	ug/L	116	(50-150)		
DUP_202008270377	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0544	ug/L	109	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0556	ug/L	111	(70-130)	30	2.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00240	ug/L	120	(50-150)		
MS_202008270376	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00256	ug/L	118	(50-150)		
DUP_202008270377	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0505	ug/L	101	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0547	ug/L	109	(70-130)	30	8.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202008270376	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00227	ug/L	114	(50-150)		
DUP_202008270377	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0552	ug/L	110	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0527	ug/L	105	(70-130)	30	4.6
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00213	ug/L	106	(50-150)		
MS_202008270376	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00214	ug/L	105	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1271540 Analytical Batch: 1272049

Analysis Date: 08/31/2020

DUP_202008280286	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0286	ug/L	122	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0279	ug/L	119	(70-130)	30	2.5
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00205	ug/L	109	(50-150)		
MS_202008280287	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00199	ug/L	106	(50-150)		
DUP_202008280286	13C2-PFDA (S)			114	%	114	(70-130)		
LCS1	13C2-PFDA (S)		100	111	%	111	(70-130)		
LCS2	13C2-PFDA (S)		100	118	%	118	(70-130)		
MBLK	13C2-PFDA (S)			116	%	116	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	116	%	116	(70-130)		
MS_202008280287	13C2-PFDA (S)		100	113	%	113	(70-130)		
DUP_202008280286	13C2-PFHxA (S)			108	%	108	(70-130)		
LCS1	13C2-PFHxA (S)		100	106	%	107	(70-130)		
LCS2	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFHxA (S)			111	%	111	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	109	%	109	(70-130)		
MS_202008280287	13C2-PFHxA (S)		100	107	%	107	(70-130)		
DUP_202008280286	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
MS_202008280287	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
DUP_202008280286	13C3-HFPO-DA (S)			104	%	104	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	99.7	%	100	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MBLK	13C3-HFPO-DA (S)			104	%	104	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MS_202008280287	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
DUP_202008280286	13C4-PFOS- IS#2 (I)			98.1	%	98	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	96.3	%	96	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			97.8	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	97.6	%	98	(50-150)		
MS_202008280287	13C4-PFOS- IS#2 (I)		100	97.3	%	97	(50-150)		
DUP_202008280286	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0260	ug/L	110	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0257	ug/L	109	(70-130)	30	1.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00201	ug/L	106	(50-150)		
MS_202008280287	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00194	ug/L	103	(50-150)		
DUP_202008280286	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0263	ug/L	113	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0261	ug/L	112	(70-130)	30	0.76
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00191	ug/L	103	(50-150)		
MS_202008280287	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00190	ug/L	102	(50-150)		
DUP_202008280286	d3-NMeFOSAA (I)			107	%	107	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MBLK	d3-NMeFOSAA (I)			106	%	106	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
MS_202008280287	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
DUP_202008280286	d5-NEtFOSAA (S)			107	%	107	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MBLK	d5-NEtFOSAA (S)			106	%	106	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202008280287	d5-NEFOSAA (S)		100	107	%	107	(70-130)		
DUP_202008280286	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0261	ug/L	105	(70-130)	30	1.5
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00195	ug/L	98	(50-150)		
MS_202008280287	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00200	ug/L	100	(50-150)		
DUP_202008280286	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0283	ug/L	113	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0278	ug/L	111	(70-130)	30	1.8
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	104	(50-150)		
MS_202008280287	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00204	ug/L	102	(50-150)		
DUP_202008280286	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0274	ug/L	110	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0283	ug/L	113	(70-130)	30	2.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	107	(50-150)		
MS_202008280287	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00208	ug/L	104	(50-150)		
DUP_202008280286	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0250	ug/L	113	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0245	ug/L	111	(70-130)	30	2.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00187	ug/L	106	(50-150)		
MS_202008280287	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00205	ug/L	105	(50-150)		
DUP_202008280286	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0301	ug/L	121	(70-130)	30	3.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00229	ug/L	114	(50-150)		
MS_202008280287	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00210	ug/L	105	(50-150)		
DUP_202008280286	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0297	ug/L	119	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0295	ug/L	118	(70-130)	30	0.68
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202008280287	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00211	ug/L	105	(50-150)		
DUP_202008280286	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0278	ug/L	111	(70-130)	30	1.8
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00221	ug/L	110	(50-150)		
MS_202008280287	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00228	ug/L	104	(50-150)		
DUP_202008280286	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0261	ug/L	114	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0261	ug/L	114	(70-130)	30	0.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00186	ug/L	102	(50-150)		
MS_202008280287	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00190	ug/L	104	(50-150)		
DUP_202008280286	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0278	ug/L	111	(70-130)	30	0.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00224	ug/L	112	(50-150)		
MS_202008280287	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00278	ug/L	106	(50-150)		
DUP_202008280286	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0293	ug/L	117	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0301	ug/L	121	(70-130)	30	2.7
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00237	ug/L	119	(50-150)		
MS_202008280287	Perfluorononanoic acid (PFNA)	ND	0.002	0.00227	ug/L	113	(50-150)		
DUP_202008280286	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0274	ug/L	118	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0273	ug/L	118	(70-130)	30	0.37
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00209	ug/L	113	(50-150)		
MS_202008280287	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00213	ug/L	109	(50-150)		
DUP_202008280286	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0292	ug/L	117	(70-130)	30	0.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00229	ug/L	114	(50-150)		
MS_202008280287	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00236	ug/L	109	(50-150)		
DUP_202008280286	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0314	ug/L	126	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0321	ug/L	128	(70-130)	30	2.2

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00259	ug/L	129	(50-150)		
MS_202008280287	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00253	ug/L	110	(50-150)		
DUP_202008280286	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0315	ug/L	126	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0323	ug/L	129	(70-130)	30	2.5
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00229	ug/L	114	(50-150)		
MS_202008280287	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00220	ug/L	110	(50-150)		
DUP_202008280286	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0299	ug/L	120	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0309	ug/L	123	(70-130)	30	3.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00224	ug/L	112	(50-150)		
MS_202008280287	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00220	ug/L	110	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1271848 Analytical Batch: 1272407

Analysis Date: 09/01/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0443	ug/L	94	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0488	ug/L	104	(70-130)	30	9.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00195	ug/L	104	(50-150)		
MS2_202008270876	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0477	ug/L	101	(70-130)		
MSD2_202008270876	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0498	ug/L	106	(70-130)	30	4.3
LCS3	13C2-PFDA (S)		100	119	%	119	(70-130)		
LCS4	13C2-PFDA (S)		100	120	%	120	(70-130)		
MBLK	13C2-PFDA (S)			117	%	117	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	121	%	121	(70-130)		
MS2_202008270876	13C2-PFDA (S)		100	115	%	115	(70-130)		
MSD2_202008270876	13C2-PFDA (S)		100	118	%	118	(70-130)		
LCS3	13C2-PFHxA (S)		100	125	%	125	(70-130)		
LCS4	13C2-PFHxA (S)		100	124	%	124	(70-130)		
MBLK	13C2-PFHxA (S)			114	%	114	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	118	%	118	(70-130)		
MS2_202008270876	13C2-PFHxA (S)		100	112	%	112	(70-130)		
MSD2_202008270876	13C2-PFHxA (S)		100	116	%	116	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.6	%	99	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFOA- IS#1 (I)			100	%	100	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	99.3	%	99	(50-150)		
MS2_202008270876	13C2-PFOA- IS#1 (I)		100	99.2	%	99	(50-150)		
MSD2_202008270876	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	116	%	116	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	114	%	114	(70-130)		
MBLK	13C3-HFPO-DA (S)			106	%	106	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	109	%	109	(70-130)		
MS2_202008270876	13C3-HFPO-DA (S)		100	104	%	105	(70-130)		
MSD2_202008270876	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			98.5	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	97.7	%	98	(50-150)		
MS2_202008270876	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
MSD2_202008270876	13C4-PFOS- IS#2 (I)		100	99.7	%	100	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0454	ug/L	94	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0491	ug/L	101	(70-130)	30	7.8
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00198	ug/L	105	(50-150)		
MS2_202008270876	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0473	ug/L	98	(70-130)		
MSD2_202008270876	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0474	ug/L	98	(70-130)	30	0.15
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0452	ug/L	97	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0482	ug/L	103	(70-130)	30	6.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00197	ug/L	106	(50-150)		
MS2_202008270876	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0472	ug/L	101	(70-130)		
MSD2_202008270876	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0492	ug/L	106	(70-130)	30	4.4
LCS3	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MBLK	d3-NMeFOSAA (I)			99.5	%	100	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	99.4	%	99	(50-150)		
MS2_202008270876	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MSD2_202008270876	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	114	%	115	(70-130)		
MBLK	d5-NEtFOSAA (S)			112	%	112	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	110	%	110	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 889747  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202008270876	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MSD2_202008270876	d5-NEtFOSAA (S)		100	116	%	116	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0490	ug/L	98	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0526	ug/L	105	(70-130)	30	6.9
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00201	ug/L	101	(50-150)		
MS2_202008270876	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0478	ug/L	96	(70-130)		
MSD2_202008270876	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0491	ug/L	98	(70-130)	30	2.6
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0475	ug/L	95	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0524	ug/L	105	(70-130)	30	9.8
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	105	(50-150)		
MS2_202008270876	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0503	ug/L	101	(70-130)		
MSD2_202008270876	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0516	ug/L	103	(70-130)	30	2.6
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0493	ug/L	99	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0521	ug/L	104	(70-130)	30	5.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS2_202008270876	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0509	ug/L	102	(70-130)		
MSD2_202008270876	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0520	ug/L	104	(70-130)	30	2.1
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0430	ug/L	97	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0458	ug/L	104	(70-130)	30	6.3
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00173	ug/L	98	(50-150)		
MS2_202008270876	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0390	ug/L	88	(70-130)		
MSD2_202008270876	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0428	ug/L	97	(70-130)	30	9.3
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0486	ug/L	97	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0536	ug/L	107	(70-130)	30	9.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00226	ug/L	113	(50-150)		
MS2_202008270876	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0541	ug/L	108	(70-130)		
MSD2_202008270876	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0533	ug/L	107	(70-130)	30	1.5
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0537	ug/L	107	(70-130)	30	7.7
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00217	ug/L	109	(50-150)		
MS2_202008270876	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0552	ug/L	110	(70-130)		
MSD2_202008270876	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0521	ug/L	104	(70-130)	30	5.7

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Report: 889747  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0481	ug/L	96	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0514	ug/L	103	(70-130)	30	6.6
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00228	ug/L	114	(50-150)		
MS2_202008270876	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0506	ug/L	101	(70-130)		
MSD2_202008270876	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0492	ug/L	98	(70-130)	30	2.9
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0443	ug/L	97	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0474	ug/L	104	(70-130)	30	6.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00198	ug/L	108	(50-150)		
MS2_202008270876	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0471	ug/L	103	(70-130)		
MSD2_202008270876	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0477	ug/L	105	(70-130)	30	1.3
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0525	ug/L	105	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0546	ug/L	109	(70-130)	30	3.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00226	ug/L	113	(50-150)		
MS2_202008270876	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0495	ug/L	99	(70-130)		
MSD2_202008270876	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0495	ug/L	99	(70-130)	30	0.080
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0548	ug/L	110	(70-130)	30	7.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00231	ug/L	115	(50-150)		
MS2_202008270876	Perfluorononanoic acid (PFNA)	ND	0.05	0.0531	ug/L	106	(70-130)		
MSD2_202008270876	Perfluorononanoic acid (PFNA)	ND	0.05	0.0524	ug/L	105	(70-130)	30	1.3
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0445	ug/L	96	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0486	ug/L	105	(70-130)	30	8.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00203	ug/L	110	(50-150)		
MS2_202008270876	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0476	ug/L	103	(70-130)		
MSD2_202008270876	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0490	ug/L	106	(70-130)	30	2.9
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0527	ug/L	105	(70-130)	30	6.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00229	ug/L	115	(50-150)		
MS2_202008270876	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0518	ug/L	103	(70-130)		
MSD2_202008270876	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0519	ug/L	103	(70-130)	30	0.26
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0478	ug/L	96	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0506	ug/L	101	(70-130)	30	5.7

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00251	ug/L	125	(50-150)		
MS2_202008270876	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0521	ug/L	104	(70-130)		
MSD2_202008270876	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0517	ug/L	103	(70-130)	30	0.72
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0515	ug/L	103	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0542	ug/L	108	(70-130)	30	5.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00225	ug/L	112	(50-150)		
MS2_202008270876	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0551	ug/L	110	(70-130)		
MSD2_202008270876	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0544	ug/L	109	(70-130)	30	1.3
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0530	ug/L	106	(70-130)	30	6.6
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00208	ug/L	104	(50-150)		
MS2_202008270876	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0529	ug/L	106	(70-130)		
MSD2_202008270876	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0530	ug/L	106	(70-130)	30	0.24

**Total Organic Carbon by SM 5310C**

Analytical Batch: 1272641

Analysis Date: 09/04/2020

LCS1	Total Organic Carbon		5	5.36	mg/L	107	(90-110)		
LCS2	Total Organic Carbon		5	5.39	mg/L	108	(90-110)	20	0.56
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.238	mg/L	119	(50-150)		
MS_202008280198	Total Organic Carbon	1.5	4	6.82	mg/L	<u>132</u>	(80-120)		
MS2_202008280200	Total Organic Carbon	0.72	2	3.32	mg/L	<u>130</u>	(80-120)		
MSD_202008280198	Total Organic Carbon	1.5	4	6.62	mg/L	<u>127</u>	(80-120)	20	3.0
MSD2_202008280200	Total Organic Carbon	0.72	2	3.34	mg/L	<u>131</u>	(80-120)	20	0.60

**EPA Method 537.1 by EPA 537.1**

Prep Batch: 1272516 Analytical Batch: 1273300

Analysis Date: 09/04/2020

DUP_202009020385	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0509	ug/L	108	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0482	ug/L	102	(70-130)	30	5.5
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00205	ug/L	109	(50-150)		
MS1_202009010542	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0254	ug/L	108	(70-130)		
DUP_202009020385	13C2-PFDA (S)			106	%	106	(70-130)		
LCS3	13C2-PFDA (S)		100	108	%	108	(70-130)		
LCS4	13C2-PFDA (S)		100	101	%	101	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFDA (S)			104	%	104	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.3	%	98	(70-130)		
MS1_202009010542	13C2-PFDA (S)		100	107	%	107	(70-130)		
DUP_202009020385	13C2-PFHxA (S)			108	%	108	(70-130)		
LCS3	13C2-PFHxA (S)		100	109	%	109	(70-130)		
LCS4	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFHxA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MS1_202009010542	13C2-PFHxA (S)		100	107	%	107	(70-130)		
DUP_202009020385	13C2-PFOA- IS#1 (I)			100	%	100	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	96.3	%	96	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	97.8	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			97.7	%	98	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MS1_202009010542	13C2-PFOA- IS#1 (I)		100	97.2	%	97	(50-150)		
DUP_202009020385	13C3-HFPO-DA (S)			107	%	107	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	109	%	109	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MBLK	13C3-HFPO-DA (S)			104	%	104	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MS1_202009010542	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
DUP_202009020385	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.5	%	100	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			97.5	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MS1_202009010542	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
DUP_202009020385	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0515	ug/L	106	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0498	ug/L	103	(70-130)	30	3.4
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00222	ug/L	117	(50-150)		
MS1_202009010542	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0270	ug/L	114	(70-130)		
DUP_202009020385	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0503	ug/L	108	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0484	ug/L	104	(70-130)	30	3.6
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00213	ug/L	115	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202009010542	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0256	ug/L	110	(70-130)		
DUP_202009020385	d3-NMeFOSAA (I)			101	%	101	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	99.9	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			99.0	%	99	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MS1_202009010542	d3-NMeFOSAA (I)		100	97.4	%	97	(50-150)		
DUP_202009020385	d5-NEtFOSAA (S)			105	%	105	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	96.3	%	96	(70-130)		
MBLK	d5-NEtFOSAA (S)			104	%	104	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	98.9	%	99	(70-130)		
MS1_202009010542	d5-NEtFOSAA (S)		100	104	%	104	(70-130)		
DUP_202009020385	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0552	ug/L	110	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0530	ug/L	106	(70-130)	30	4.1
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00228	ug/L	114	(50-150)		
MS1_202009010542	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0279	ug/L	112	(70-130)		
DUP_202009020385	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0532	ug/L	106	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0508	ug/L	102	(70-130)	30	4.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00234	ug/L	117	(50-150)		
MS1_202009010542	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0280	ug/L	112	(70-130)		
DUP_202009020385	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0528	ug/L	106	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0518	ug/L	104	(70-130)	30	1.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00250	ug/L	125	(50-150)		
MS1_202009010542	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0281	ug/L	112	(70-130)		
DUP_202009020385	Perfluorobutanesulfonic acid (PFBS)	0.0020		0.00201	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0491	ug/L	111	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0482	ug/L	109	(70-130)	30	1.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00210	ug/L	118	(50-150)		
MS1_202009010542	Perfluorobutanesulfonic acid (PFBS)	0.0049	0.022	0.0294	ug/L	111	(70-130)		
DUP_202009020385	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0539	ug/L	108	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0526	ug/L	105	(70-130)	30	2.4
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00228	ug/L	114	(50-150)		
MS1_202009010542	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0296	ug/L	113	(70-130)		
DUP_202009020385	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0533	ug/L	107	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0519	ug/L	104	(70-130)	30	2.7
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00218	ug/L	109	(50-150)		
MS1_202009010542	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0270	ug/L	108	(70-130)		
DUP_202009020385	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0520	ug/L	104	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0522	ug/L	104	(70-130)	30	0.38
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00240	ug/L	120	(50-150)		
MS1_202009010542	Perfluoroheptanoic acid (PFHpA)	0.0031	0.025	0.0317	ug/L	115	(70-130)		
DUP_202009020385	Perfluorohexanesulfonic acid (PFHxS)	0.0021		0.00222	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0493	ug/L	108	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0492	ug/L	108	(70-130)	30	0.20
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00221	ug/L	121	(50-150)		
MS1_202009010542	Perfluorohexanesulfonic acid (PFHxS)	0.011	0.023	0.0358	ug/L	108	(70-130)		
DUP_202009020385	Perfluorohexanoic acid (PFHxA)	0.0031		0.00301	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0554	ug/L	111	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0551	ug/L	110	(70-130)	30	0.54
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00232	ug/L	116	(50-150)		
MS1_202009010542	Perfluorohexanoic acid (PFHxA)	0.0050	0.025	0.0324	ug/L	110	(70-130)		
DUP_202009020385	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0551	ug/L	110	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0526	ug/L	105	(70-130)	30	4.6
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00239	ug/L	120	(50-150)		
MS1_202009010542	Perfluorononanoic acid (PFNA)	0.0028	0.025	0.0314	ug/L	114	(70-130)		
DUP_202009020385	Perfluorooctanesulfonic acid (PFOS)	0.0034		0.00337	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0509	ug/L	110	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0486	ug/L	105	(70-130)	30	4.6

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 889747  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00220	ug/L	119	(50-150)		
MS1_202009010542	Perfluorooctanesulfonic acid (PFOS)	0.025	0.023	0.0486	ug/L	102	(70-130)		
DUP_202009020385	Perfluorooctanoic acid (PFOA)	0.0031		0.00302	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0544	ug/L	109	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0526	ug/L	105	(70-130)	30	3.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00250	ug/L	125	(50-150)		
MS1_202009010542	Perfluorooctanoic acid (PFOA)	0.011	0.025	0.0389	ug/L	113	(70-130)		
DUP_202009020385	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0559	ug/L	112	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0534	ug/L	107	(70-130)	30	4.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00184	ug/L	92	(50-150)		
MS1_202009010542	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0273	ug/L	108	(70-130)		
DUP_202009020385	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0566	ug/L	113	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0551	ug/L	110	(70-130)	30	2.7
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00227	ug/L	113	(50-150)		
MS1_202009010542	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0288	ug/L	115	(70-130)		
DUP_202009020385	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0541	ug/L	108	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0519	ug/L	104	(70-130)	30	4.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00219	ug/L	110	(50-150)		
MS1_202009010542	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0276	ug/L	110	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 09/09/2020

Quant Report - Page 1 of 1

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Pos Tubes (Tot, E., Coli), MPN/100ml (Tot, E., Coli), Pres/Abs (P/A)\* (Tot, E., Coli)

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required:
Comment:
Approved by:

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

**PO #:**  
**Project:**  
**Phone #:**

**Date Received:**  
**Sampled By:**  
**Sample Project Group:**

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 09/09/2020

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for  
Presence or Absence, Quantification of Total Coliform and E. Coli  
By Quantitray**

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 09/09/2020

Quant Report - Page 1 of 1

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## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 890914  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.



### STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 890914  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **September 03, 2020 at 1339**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202009030436</u>	GAC-1-20200903 Static ID: 537.1 @537.1	09/03/2020 0805
<u>202009030437</u>	GAC-2-20200903 Static ID: 537.1 @537.1	09/03/2020 0808
<u>202009030438</u>	GAC-3-20200903 Static ID: 537.1 @537.1	09/03/2020 0811
<u>202009030439</u>	GAC-4-20200903 Static ID: 537.1 @537.1	09/03/2020 0814
<u>202009030440</u>	IX-1-20200903 Static ID: 537.1 @537.1	09/03/2020 0817
<u>202009030441</u>	IX-2-20200903 Static ID: 537.1 @537.1	09/03/2020 0820
<u>202009030442</u>	IX-3-20200903 Static ID: 537.1 @537.1	09/03/2020 0825
<u>202009030443</u>	IX-4-20200903 Static ID: 537.1 @537.1	09/03/2020 0828
<u>202009030444</u>	LH-INF-20200903 @537.1 Chloride Total Organic Carbon	09/03/2020 0830
	@ANIONS48 Oil and Grease by 1664 HEM SGT	Alkalinity in CaCO3 units Sulfate
<u>202009030445</u>	GAC-5-20200903 @537.1	09/03/2020 1130
<u>202009030446</u>	GAC-6-20200903	09/03/2020 1133

**Acknowledgement of Samples Received**

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 4040 Paramount Blvd.  
 Lakewood, CA 90712

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Sample #	Sample ID	Sample Date
	@537.1	
202009030447	GAC-7-20200903	09/03/2020 1136
	@537.1	
202009030448	GAC-8-20200903	09/03/2020 1139
	@537.1	
202009030449	IX-5-20200903	09/03/2020 1142
	@537.1	
202009030450	IX-6-20200903	09/03/2020 1145
	@537.1	
202009030451	IX-7-20200903	09/03/2020 1148
	@537.1	
202009030452	IX-8-20200903	09/03/2020 1151
	@537.1	
202009030453	MB-INF-20200903	09/03/2020 1155
	@537.1	
	Chloride	@ANIONS48
	Total Organic Carbon	Oil and Grease by 1664 HEM SGT
		Alkalinity in CaCO3 units
		Sulfate
202009030454	MB-INF-20200903 MS	09/03/2020 1155
	Oil and Grease by 1664 HEM SGT	
202009030455	MB-INF-20200903 MSD	09/03/2020 1155
	Oil and Grease by 1664 HEM SGT	
202009030456	LH-INF-20200903 MS	09/03/2020 0830
	Oil and Grease by 1664 HEM SGT	
202009030457	LH-INF-20200903 MSD	09/03/2020 0830
	Oil and Grease by 1664 HEM SGT	

**Test Description**

### Acknowledgement of Samples Received

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Sample #	Sample ID	Sample Date
	@537.1 -- EPA Method 537.1	
	@ANIONS48 -- Nitrate, Nitrite by EPA 300.0	

810914

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) BC									
TEL: (949) 679-1070 LABORATORY: Eurofins Eaton Analytical		E-MAIL: mjeon@gsi-net.com		<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.									
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		SPECIAL INSTRUCTIONS: Send report copies to pegalwin@gsi-net.com, mjeon@gsi-net.com, & rdortorres@gsi-net.com. Provide EDD of sample results											
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	EPA 1664A ITEM
		DATE	TIME										
	GAC-1-20200903	9/3/20	0805	Water	2		1		X				
	GAC-2-20200903		0808	Water	1				X				
	GAC-3-20200903		0811	Water	1				X				
	GAC-4-20200903		0814	Water	1				X				
	IX-1-20200903		0817	Water	1				X				
	IX-2-20200903		0820	Water	1				X				
	IX-3-20200903		0825	Water	1				X				
	IX-4-20200903		0828	Water	1				X				
	LH-INF-20200903		0830	Water	6		2	4	X	X	X	X	
	LH-INF-DUP-BC			Water									
	GAC-5-20200903	9/3/20	1130	Water	1		2		X				
	GAC-6-20200903		1133	Water	1				X				
	GAC-7-20200903		1136	Water	1				X				
	GAC-8-20200903		1139	Water	1				X				
Relinquished by: (Signature)		[Signature]		[Signature]		Received by: (Signature)		[Signature]		Date: 9/3/20		Time: 1320	
Relinquished by: (Signature)		[Signature]		[Signature]		Received by: (Signature)		[Signature]		Date: 9-3-20		Time: 1344	
Relinquished by: (Signature)		[Signature]		[Signature]		Received by: (Signature)		[Signature]		Date:		Time:	

<p>FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070</p> <p>TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com</p> <p>LABORATORY: Eurofins Eaton Analytical</p> <p>TURNAROUND TIME:  <input type="checkbox"/> SAME DAY    <input type="checkbox"/> 24 HR    <input type="checkbox"/> 48 HR  <input type="checkbox"/> 72 HR    <input type="checkbox"/> 5 DAYS    <input checked="" type="checkbox"/> STANDARD</p> <p>SPECIAL INSTRUCTIONS:          Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com,          &amp; rtorres@gsi-net.com;          Provide EDD of sample results</p>	<p>PROJECT NAME: WRD Pilot</p> <p>PROJECT CONTACT: Miae Jeon</p> <p>GLOBAL ID:</p> <p>PROJECT NO.: 5302</p> <p>LAB CONTACT: Sophia Liang</p> <p>SAMPLER(S): (PRINT) <u>BU</u></p>	<p style="text-align: center;"><b>REQUESTED ANALYSES</b></p> <p style="text-align: center;">Please check box or fill in blank as needed.</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th rowspan="2">LAB USE ONLY</th> <th rowspan="2">SAMPLE ID</th> <th colspan="2">SAMPLING</th> <th rowspan="2">MATRIX</th> <th rowspan="2">NO. OF CONT.</th> <th colspan="2">Preservation</th> <th rowspan="2">Field Filtered</th> <th rowspan="2">PFAS - Full list (EPA 537.1)</th> <th rowspan="2">Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)</th> <th rowspan="2">Alkalinity (as CaCO3), (SM 2320B)</th> <th rowspan="2">TOC (SM 5310C)</th> <th rowspan="2">EPA 1661/1631 HEM</th> </tr> <tr> <th>DATE</th> <th>TIME</th> <th>Unpreserved</th> <th>Preserved</th> </tr> <tr> <td></td> <td>IX-5-20200903</td> <td>9/3/20</td> <td>1142</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-6-20200903</td> <td>↓</td> <td>1145</td> <td>Water</td> <td>↓</td> <td></td> <td>↓</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-7-20200903</td> <td>↓</td> <td>1148</td> <td>Water</td> <td>↓</td> <td></td> <td>↓</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-8-20200903</td> <td>↓</td> <td>1151</td> <td>Water</td> <td>↓</td> <td></td> <td>↓</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>MB-INF-20200903</td> <td>↓</td> <td>1155</td> <td>Water</td> <td>6</td> <td></td> <td>24</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>MB-INF-DUP-BC</td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>FB-BC</td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>MB-INF-20200903 MS</td> <td>9/3/20</td> <td>1155</td> <td>Water</td> <td>1</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>MB-INF-20200903 MSB</td> <td>↓</td> <td>1155</td> <td>Water</td> <td>1</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>LH-INF-20200903 MS</td> <td>↓</td> <td>0830</td> <td>Water</td> <td>1</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>LH-INF-20200903 MS D</td> <td>↓</td> <td>0830</td> <td>Water</td> <td>1</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Preservation		Field Filtered	PFAS - Full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	EPA 1661/1631 HEM	DATE	TIME	Unpreserved	Preserved		IX-5-20200903	9/3/20	1142	Water	2		2		X						IX-6-20200903	↓	1145	Water	↓		↓		X						IX-7-20200903	↓	1148	Water	↓		↓		X						IX-8-20200903	↓	1151	Water	↓		↓		X						MB-INF-20200903	↓	1155	Water	6		24		X	X	X	X			MB-INF-DUP-BC			Water											FB-BC			Water											MB-INF-20200903 MS	9/3/20	1155	Water	1		1								MB-INF-20200903 MSB	↓	1155	Water	1		1								LH-INF-20200903 MS	↓	0830	Water	1		1								LH-INF-20200903 MS D	↓	0830	Water	1		1						
LAB USE ONLY	SAMPLE ID	SAMPLING			MATRIX	NO. OF CONT.			Preservation								Field Filtered	PFAS - Full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	EPA 1661/1631 HEM																																																																																																																																																								
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<p>Relinquished by: (Signature) <u>[Signature]</u> Date: <u>9/3/20</u> Time: <u>13:39</u></p> <p>Relinquished by: (Signature) <u>[Signature]</u> Date: <u>9-3-20</u> Time: <u>13:39</u></p> <p>Relinquished by: (Signature) <u>[Signature]</u> Date: _____ Time: _____</p>																																																																																																																																																																														

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 84914

**SAMPLE TEMP RECEIVED:**

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.  
 SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 649A (Observation = 13.8 °C) (Corr. Factor = 0.2 °C) (Final = 13.6 °C)

TYPE OF ICE: Real  Synthetic  No Ice  CONDITION OF ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

**Compliance Acceptance Criteria:**

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (If received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (If received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)	2 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)
3 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)	4 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (If received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

7) VOA Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(0251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: <u>Yonei</u>	PRINT NAME: <u>Yonei</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>9-3-20</u>	TIME: <u>1339</u>
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Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 890914  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

**Folder Comments**

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Analytical results for Oil and Grease with Silica Gel Treatment are submitted by Eurofins  
Calscience in Garden Grove, CAELAP 2944 exp 9-30-2020

**Flags Legend:**

M2 - Matrix spike recovery was low; the associated blank spike recovery was acceptable.

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	<b>202009030440</b>	<b><u>IX-1-20200903</u></b>				
09/09/2020 12:16	Perfluorohexanoic acid (PFHxA)		0.0021		ug/L	0.0020
	<b>202009030441</b>	<b><u>IX-2-20200903</u></b>				
09/09/2020 12:35	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
	<b>202009030442</b>	<b><u>IX-3-20200903</u></b>				
09/09/2020 14:01	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
	<b>202009030443</b>	<b><u>IX-4-20200903</u></b>				
09/09/2020 14:20	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
	<b>202009030444</b>	<b><u>LH-INF-20200903</u></b>				
09/09/2020 19:02	Alkalinity in CaCO3 units		200		mg/L	2.0
09/03/2020 20:13	Chloride		110	250	mg/L	2.5
09/03/2020 20:13	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
09/03/2020 20:13	Nitrate as NO3 (calc)		13	45	mg/L	2.2
09/09/2020 14:30	Perfluorobutanesulfonic acid (PFBS)		0.0060		ug/L	0.0020
09/09/2020 14:30	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
09/09/2020 14:30	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
09/09/2020 14:30	Perfluorononanoic acid (PFNA)		0.0032		ug/L	0.0020
09/09/2020 14:30	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
09/09/2020 14:30	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
09/03/2020 20:13	Sulfate		180	250	mg/L	2.5
09/03/2020 20:13	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
09/10/2020 04:34	Total Organic Carbon		0.76		mg/L	0.20
	<b>202009030445</b>	<b><u>GAC-5-20200903</u></b>				
09/09/2020 14:39	Perfluorobutanesulfonic acid (PFBS)		0.0060		ug/L	0.0020
09/09/2020 14:39	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
09/09/2020 14:39	Perfluorohexanoic acid (PFHxA)		0.0046		ug/L	0.0020
09/09/2020 14:39	Perfluorooctanesulfonic acid (PFOS)		0.0060		ug/L	0.0020
09/09/2020 14:39	Perfluorooctanoic acid (PFOA)		0.0062		ug/L	0.0020
	<b>202009030447</b>	<b><u>GAC-7-20200903</u></b>				
09/09/2020 14:59	Perfluorobutanesulfonic acid (PFBS)		0.0046		ug/L	0.0020
09/09/2020 14:59	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
	<b>202009030449</b>	<b><u>IX-5-20200903</u></b>				
09/09/2020 15:18	Perfluorohexanoic acid (PFHxA)		0.0028		ug/L	0.0020
	<b>202009030450</b>	<b><u>IX-6-20200903</u></b>				

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
09/10/2020 16:01	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
	<b>202009030451</b>	<b><u>IX-7-20200903</u></b>				
09/10/2020 18:06	Perfluorohexanoic acid (PFHxA)		0.0050		ug/L	0.0020
	<b>202009030452</b>	<b><u>IX-8-20200903</u></b>				
09/10/2020 16:20	Perfluorohexanoic acid (PFHxA)		0.0052		ug/L	0.0020
	<b>202009030453</b>	<b><u>MB-INF-20200903</u></b>				
09/09/2020 18:54	Alkalinity in CaCO3 units		170		mg/L	2.0
09/03/2020 23:14	Chloride		48	250	mg/L	2.5
09/03/2020 23:14	Nitrate as Nitrogen by IC		2.6	10	mg/L	0.50
09/03/2020 23:14	Nitrate as NO3 (calc)		11	45	mg/L	2.2
09/11/2020 07:07	Oil and Grease with SGT		1.56		mg/L	1.2
09/10/2020 18:15	Perfluorobutanesulfonic acid (PFBS)		0.0091		ug/L	0.0020
09/10/2020 18:15	Perfluoroheptanoic acid (PFHpA)		0.0038		ug/L	0.0020
09/10/2020 18:15	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
09/10/2020 18:15	Perfluorohexanoic acid (PFHxA)		0.0053		ug/L	0.0020
09/10/2020 18:15	Perfluorononanoic acid (PFNA)		0.0038		ug/L	0.0020
09/10/2020 18:15	Perfluorooctanesulfonic acid (PFOS)		0.035		ug/L	0.0020
09/10/2020 18:15	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
09/03/2020 23:14	Sulfate		75	250	mg/L	2.5
09/03/2020 23:14	Total Nitrate, Nitrite-N, CALC		2.6		mg/L	0.10
09/10/2020 04:51	Total Organic Carbon		1.1		mg/L	0.20

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Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20200903 (202009030436)</b>					<b>Sampled on 09/03/2020 0805</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	13C2-PFDA	90	%		1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	13C2-PFHxA	101	%		1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	13C3-HFPO-DA	90	%		1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	d3-NMeFOSAA	102	%		1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	d5-NEtFOSAA	101	%		1

<b>GAC-2-20200903 (202009030437)</b>					<b>Sampled on 09/03/2020 0808</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	13C2-PFDA	76	%		1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	13C2-PFHxA	87	%		1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	139	%		1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	79	%		1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	115	%		1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**GAC-3-20200903 (202009030438)**

Sampled on 09/03/2020 0811

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	13C2-PFDA	87	%		1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	13C2-PFHxA	98	%		1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	87	%		1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	113	%		1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**GAC-4-20200903 (202009030439)**

Sampled on 09/03/2020 0814

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	13C2-PFDA	85	%		1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	13C2-PFHxA	94	%		1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	125	%		1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	88	%		1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	116	%		1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**IX-1-20200903 (202009030440)**

Sampled on 09/03/2020 0817

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND (M2)	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0021	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	13C2-PFDA	96	%		1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	13C2-PFHxA	100	%		1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	94	%		1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	116	%		1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**IX-2-20200903 (202009030441)**

**Sampled on 09/03/2020 0820**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	13C2-PFDA	92	%		1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	13C2-PFHxA	99	%		1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	95	%		1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	114	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	108	%		1
<b>IX-3-20200903 (202009030442)</b>						<b>Sampled on 09/03/2020 0825</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	13C2-PFDA	92	%		1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	13C2-PFHxA	99	%		1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	92	%		1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	118	%		1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	101	%		1

<b>IX-4-20200903 (202009030443)</b>						<b>Sampled on 09/03/2020 0828</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	13C2-PFDA	91	%		1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	13C2-PFHxA	99	%		1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	91	%		1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	120	%		1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**LH-INF-20200903 (202009030444)**

Sampled on 09/03/2020 0830

**SM 5310C - Total Organic Carbon**

09/10/20 04:34	1273528	(SM 5310C)	Total Organic Carbon	0.76	mg/L	0.20	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

09/03/20 20:13	1272797	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
09/03/20 20:13	1272797	(EPA 300.0)	Nitrate as NO3 (calc)	13	mg/L	2.2	5
09/03/20 20:13	1272797	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
09/03/20 20:13	1272797	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

09/03/20 20:13	1272798	(EPA 300.0)	Chloride	110	mg/L	2.5	5
09/03/20 20:13	1272798	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluoronanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0060	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluoronanoic acid (PFNA)	0.0032	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	13C2-PFDA	96	%		1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	13C2-PFHxA	99	%		1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	94	%		1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	120	%		1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**EPA 1664 HEM-SGT - Oil and Grease by 1664 HEM SGT**

09/11/20 07:07	(EPA 1664 HEM-SGT)	Oil and Grease with SGT	ND	mg/L	1.2	1
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**SM 2320B - Alkalinity in CaCO3 units**

09/09/20 19:02	1273531 (SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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**GAC-5-20200903 (202009030445)**

Sampled on 09/03/2020 1130

**EPA 537.1 - EPA Method 537.1**

09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
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Rounding on totals after summation.  
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Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0060	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0060	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0062	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	13C2-PFDA	88	%		1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	13C2-PFHxA	101	%		1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	91	%		1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	119	%		1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	d5-NetFOSAA	94	%		1

**GAC-6-20200903 (202009030446)**

**Sampled on 09/03/2020 1133**

**EPA 537.1 - EPA Method 537.1**

09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

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 1 800 566 LABS (1 800 566 5227)

Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	13C2-PFDA	83	%		1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	13C2-PFHxA	96	%		1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	127	%		1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	86	%		1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	118	%		1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	101	%		1

**GAC-7-20200903 (202009030447)**

Sampled on 09/03/2020 1136

**EPA 537.1 - EPA Method 537.1**

09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0046	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	13C2-PFDA	87	%		1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	13C2-PFHxA	100	%		1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	90	%		1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	117	%		1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	100	%		1

**GAC-8-20200903 (202009030448)**

Sampled on 09/03/2020 1139

**EPA 537.1 - EPA Method 537.1**

09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	13C2-PFDA	89	%		1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	13C2-PFHxA	99	%		1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	91	%		1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	116	%		1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	100	%		1

**IX-5-20200903 (202009030449)**

**Sampled on 09/03/2020 1142**

**EPA 537.1 - EPA Method 537.1**

09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0028	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	13C2-PFDA	94	%		1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	13C2-PFHxA	99	%		1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	118	%		1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	91	%		1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	110	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	117	%		1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**IX-6-20200903 (202009030450)**

**Sampled on 09/03/2020 1145**

**EPA 537.1 - EPA Method 537.1**

09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	13C2-PFDA	77	%		1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	13C2-PFHxA	80	%		1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	13C2-PFOA- IS#1	139	%		1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	13C3-HFPO-DA	75	%		1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	d3-NMeFOSAA	107	%		1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**IX-7-20200903 (202009030451)**

**Sampled on 09/03/2020 1148**

**EPA 537.1 - EPA Method 537.1**

09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
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Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0050	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	13C2-PFDA	82	%		1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	13C2-PFHxA	87	%		1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	13C2-PFOA- IS#1	126	%		1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	13C3-HFPO-DA	82	%		1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	d3-NMeFOSAA	105	%		1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	d5-NetFOSAA	93	%		1

**IX-8-20200903 (202009030452)**

**Sampled on 09/03/2020 1151**

**EPA 537.1 - EPA Method 537.1**

09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0052	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	13C2-PFDA	93	%		1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	13C2-PFHxA	98	%		1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	13C3-HFPO-DA	92	%		1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	13C4-PFOS- IS#2	114	%		1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	d3-NMeFOSAA	107	%		1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**MB-INF-20200903 (202009030453)**

Sampled on 09/03/2020 1155

**SM 5310C - Total Organic Carbon**

09/10/20 04:51	1273528	(SM 5310C)	Total Organic Carbon	1.1	mg/L	0.20	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

09/03/20 23:14	1272797	(EPA 300.0)	Nitrate as Nitrogen by IC	2.6	mg/L	0.50	5
09/03/20 23:14	1272797	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
09/03/20 23:14	1272797	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
09/03/20 23:14	1272797	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.6	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

09/03/20 23:14	1272798	(EPA 300.0)	Chloride	48	mg/L	2.5	5
09/03/20 23:14	1272798	(EPA 300.0)	Sulfate	75	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0091	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0038	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0053	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0038	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.035	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	13C2-PFDA	89	%		1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	13C2-PFHxA	91	%		1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	13C3-HFPO-DA	83	%		1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	13C4-PFOS- IS#2	117	%		1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	d3-NMeFOSAA	105	%		1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	d5-NEtFOSAA	89	%		1
<b>EPA 1664 HEM-SGT - Oil and Grease by 1664 HEM SGT</b>									
	09/11/20 07:07			(EPA 1664 HEM-SGT)	Oil and Grease with SGT	1.56	mg/L	1.2	1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	09/09/20 18:54		1273531	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
<b><u>MB-INF-20200903 MS (202009030454)</u></b>						<b>Sampled on 09/03/2020 1155</b>			
<b>EPA 1664 HEM-SGT - Oil and Grease by 1664 HEM SGT</b>									
	09/11/20 07:07			(EPA 1664 HEM-SGT)	Oil and Grease with SGT	94	%	1.2	1
<b><u>MB-INF-20200903 MSD (202009030455)</u></b>						<b>Sampled on 09/03/2020 1155</b>			
<b>EPA 1664 HEM-SGT - Oil and Grease by 1664 HEM SGT</b>									
	09/11/20 07:07			(EPA 1664 HEM-SGT)	Oil and Grease with SGT	95	%	1.2	1
<b><u>LH-INF-20200903 MS (202009030456)</u></b>						<b>Sampled on 09/03/2020 0830</b>			

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 1664 HEM-SGT - Oil and Grease by 1664 HEM SGT</b>									
	09/11/20 07:07			(EPA 1664 HEM-SGT)	Oil and Grease with SGT	95	%	1.2	1
<b><u>LH-INF-20200903 MSD (202009030457)</u></b>						<b>Sampled on 09/03/2020 0830</b>			
<b>EPA 1664 HEM-SGT - Oil and Grease by 1664 HEM SGT</b>									
	09/11/20 07:07			(EPA 1664 HEM-SGT)	Oil and Grease with SGT	94	%	1.2	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Water Replenishment District

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1272797**

202009030444 LH-INF-20200903  
 202009030453 MB-INF-20200903

**Analysis Date: 09/03/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1272798**

202009030444 LH-INF-20200903  
 202009030453 MB-INF-20200903

**Analysis Date: 09/03/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Total Organic Carbon**

**Analytical Batch: 1273528**

202009030444 LH-INF-20200903  
 202009030453 MB-INF-20200903

**Analysis Date: 09/10/2020**

Analyzed by: ZB2Z  
 Analyzed by: ZB2Z

**Alkalinity in CaCO3 units**

**Analytical Batch: 1273531**

202009030444 LH-INF-20200903  
 202009030453 MB-INF-20200903

**Analysis Date: 09/09/2020**

Analyzed by: ZS6I  
 Analyzed by: ZS6I

**EPA Method 537.1**

**Prep Batch: 1272816 Analytical Batch: 1273582**

202009030437 GAC-2-20200903  
 202009030438 GAC-3-20200903  
 202009030439 GAC-4-20200903  
 202009030440 IX-1-20200903  
 202009030441 IX-2-20200903  
 202009030442 IX-3-20200903  
 202009030443 IX-4-20200903  
 202009030444 LH-INF-20200903  
 202009030445 GAC-5-20200903  
 202009030446 GAC-6-20200903  
 202009030447 GAC-7-20200903  
 202009030448 GAC-8-20200903  
 202009030449 IX-5-20200903

**Analysis Date: 09/09/2020**

Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
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 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM

**EPA Method 537.1**

**Prep Batch: 1273351 Analytical Batch: 1273976**

202009030436 GAC-1-20200903  
 202009030450 IX-6-20200903  
 202009030451 IX-7-20200903  
 202009030452 IX-8-20200903  
 202009030453 MB-INF-20200903

**Analysis Date: 09/10/2020**

Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM

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Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1272797</b>					<b>Analysis Date: 09/03/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.64	mg/L	106	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.65	mg/L	106	(90-110)	20	0.38
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0488	mg/L	98	(50-150)		
MS_202009030444	Nitrate as Nitrogen by IC	2.8	6.5	9.46	mg/L	106	(80-120)		
MS_202009030453	Nitrate as Nitrogen by IC	2.6	6.5	9.21	mg/L	106	(80-120)		
MSD_202009030444	Nitrate as Nitrogen by IC	2.8	6.5	9.65	mg/L	109	(80-120)	20	1.9
MSD_202009030453	Nitrate as Nitrogen by IC	2.6	6.5	9.20	mg/L	106	(80-120)	20	0.097
LCS1	Nitrite Nitrogen by IC		1	1.04	mg/L	104	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.04	mg/L	104	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0453	mg/L	91	(50-150)		
MS_202009030444	Nitrite Nitrogen by IC	ND	2.5	2.50	mg/L	100	(80-120)		
MS_202009030453	Nitrite Nitrogen by IC	ND	2.5	2.59	mg/L	104	(80-120)		
MSD_202009030444	Nitrite Nitrogen by IC	ND	2.5	2.59	mg/L	103	(80-120)	20	3.5
MSD_202009030453	Nitrite Nitrogen by IC	ND	2.5	2.59	mg/L	104	(80-120)	20	0.073
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1272798</b>					<b>Analysis Date: 09/03/2020</b>				
LCS1	Chloride		25	27.3	mg/L	109	(90-110)		
LCS2	Chloride		25	27.4	mg/L	110	(90-110)	20	0.37
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.457	mg/L	91	(50-150)		
MS_202009030444	Chloride	110	65	178	mg/L	109	(80-120)		
MS_202009030453	Chloride	48	65	120	mg/L	115	(80-120)		
MSD_202009030444	Chloride	110	65	179	mg/L	112	(80-120)	20	0.76
MSD_202009030453	Chloride	48	65	120	mg/L	115	(80-120)	20	0.16
LCS1	Sulfate		50	53.6	mg/L	107	(90-110)		
LCS2	Sulfate		50	53.8	mg/L	108	(90-110)	20	0.37
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.996	mg/L	100	(50-150)		
MRLW	Sulfate		0.25	0.242	mg/L	97	(50-150)		
MS_202009030444	Sulfate	180	125	314	mg/L	108	(80-120)		
MS_202009030453	Sulfate	75	125	212	mg/L	110	(80-120)		
MSD_202009030444	Sulfate	180	125	318	mg/L	111	(80-120)	20	1.2

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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 890914  
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 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202009030453	Sulfate	75	125	212	mg/L	110	(80-120)	20	0.20

**Total Organic Carbon by SM 5310C**

Analytical Batch: 1273528

Analysis Date: 09/10/2020

LCS1	Total Organic Carbon		5	5.10	mg/L	102	(90-110)		
LCS2	Total Organic Carbon		5	5.04	mg/L	101	(90-110)	20	1.2
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.269	mg/L	135	(50-150)		
MS_202009040105	Total Organic Carbon	4.8	4	ND	mg/L				
MSD_202009040105	Total Organic Carbon	4.8	4	ND	mg/L				

**Alkalinity in CaCO3 units by SM 2320B**

Analytical Batch: 1273531

Analysis Date: 09/09/2020

LCS1	Alkalinity in CaCO3 units		100	99.6	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.4	mg/L	99	(90-110)	20	0.20
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.65	mg/L	83	(50-150)		
MS_202009030272	Alkalinity in CaCO3 units	46	100	148	mg/L	101	(80-120)		
MS_202009040173	Alkalinity in CaCO3 units	22	100	122	mg/L	100	(80-120)		
MSD_202009030272	Alkalinity in CaCO3 units	46	100	148	mg/L	102	(80-120)	20	0.027
MSD_202009040173	Alkalinity in CaCO3 units	22	100	124	mg/L	101	(80-120)	20	1.2

**EPA Method 537.1 by EPA 537.1**

Prep Batch: 1272816 Analytical Batch: 1273582

Analysis Date: 09/09/2020

DUP_202009030441	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0218	ug/L	93	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0222	ug/L	94	(70-130)	30	1.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00171	ug/L	91	(50-150)		
MS_202009030440	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00175	ug/L	56	(50-150)		
DUP_202009030441	13C2-PFDA (S)			91.0	%	91	(70-130)		
LCS1	13C2-PFDA (S)		100	90.1	%	90	(70-130)		
LCS2	13C2-PFDA (S)		100	88.7	%	89	(70-130)		
MBLK	13C2-PFDA (S)			92.2	%	92	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	90.0	%	90	(70-130)		
MS_202009030440	13C2-PFDA (S)		100	94.7	%	95	(70-130)		
DUP_202009030441	13C2-PFHxA (S)			99.1	%	99	(70-130)		
LCS1	13C2-PFHxA (S)		100	99.4	%	99	(70-130)		
LCS2	13C2-PFHxA (S)		100	93.3	%	93	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 890914  
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 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFHxA (S)			104	%	104	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	103	%	103	(70-130)		
MS_202009030440	13C2-PFHxA (S)		100	100	%	100	(70-130)		
DUP_202009030441	13C2-PFOA- IS#1 (I)			118	%	118	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			113	%	113	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
MS_202009030440	13C2-PFOA- IS#1 (I)		100	113	%	113	(50-150)		
DUP_202009030441	13C3-HFPO-DA (S)			93.6	%	94	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	93.5	%	93	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	81.2	%	81	(70-130)		
MBLK	13C3-HFPO-DA (S)			95.9	%	96	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	94.8	%	95	(70-130)		
MS_202009030440	13C3-HFPO-DA (S)		100	93.6	%	94	(70-130)		
DUP_202009030441	13C4-PFOS- IS#2 (I)			107	%	107	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	105	(50-150)		
MS_202009030440	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
DUP_202009030441	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0234	ug/L	99	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0232	ug/L	98	(70-130)	30	1.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00211	ug/L	112	(50-150)		
MS_202009030440	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00213	ug/L	112	(50-150)		
DUP_202009030441	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0217	ug/L	93	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0221	ug/L	95	(70-130)	30	1.8
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00181	ug/L	97	(50-150)		
MS_202009030440	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00188	ug/L	84	(50-150)		
DUP_202009030441	d3-NMeFOSAA (I)			118	%	118	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	113	%	113	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	113	%	113	(50-150)		
MBLK	d3-NMeFOSAA (I)			113	%	113	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	112	%	112	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 890914  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202009030440	d3-NMeFOSAA (I)		100	115	%	115	(50-150)		
DUP_202009030441	d5-NEtFOSAA (S)			108	%	108	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	99.7	%	100	(70-130)		
MBLK	d5-NEtFOSAA (S)			105	%	105	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MS_202009030440	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
DUP_202009030441	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0236	ug/L	95	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0212	ug/L	85	(70-130)	30	11
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00206	ug/L	103	(50-150)		
MS_202009030440	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00218	ug/L	109	(50-150)		
DUP_202009030441	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0264	ug/L	105	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0262	ug/L	105	(70-130)	30	0.76
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00226	ug/L	113	(50-150)		
MS_202009030440	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00243	ug/L	50	(50-150)		
DUP_202009030441	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0265	ug/L	106	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0270	ug/L	108	(70-130)	30	1.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00230	ug/L	115	(50-150)		
MS_202009030440	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00233	ug/L	54	(50-150)		
DUP_202009030441	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0234	ug/L	106	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0240	ug/L	108	(70-130)	30	2.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00198	ug/L	112	(50-150)		
MS_202009030440	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00230	ug/L	130	(50-150)		
DUP_202009030441	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0239	ug/L	96	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0242	ug/L	97	(70-130)	30	1.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00203	ug/L	102	(50-150)		
MS_202009030440	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00229	ug/L	92	(50-150)		
DUP_202009030441	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0220	ug/L	88	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0217	ug/L	87	(70-130)	30	1.4
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00181	ug/L	91	(50-150)		
MS_202009030440	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00191	ug/L	54	(50-150)		
DUP_202009030441	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0266	ug/L	107	(70-130)	30	1.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00232	ug/L	116	(50-150)		
MS_202009030440	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00288	ug/L	119	(50-150)		
DUP_202009030441	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0251	ug/L	110	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0255	ug/L	112	(70-130)	30	1.6
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00211	ug/L	116	(50-150)		
MS_202009030440	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00228	ug/L	123	(50-150)		
DUP_202009030441	Perfluorohexanoic acid (PFHxA)	0.0031		0.00317	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0264	ug/L	106	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0248	ug/L	99	(70-130)	30	6.3
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00232	ug/L	116	(50-150)		
MS_202009030440	Perfluorohexanoic acid (PFHxA)	0.0021	0.002	0.00429	ug/L	111	(50-150)		
DUP_202009030441	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0256	ug/L	102	(70-130)	30	0.78
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00230	ug/L	115	(50-150)		
MS_202009030440	Perfluorononanoic acid (PFNA)	ND	0.002	0.00265	ug/L	114	(50-150)		
DUP_202009030441	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0244	ug/L	105	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0256	ug/L	110	(70-130)	30	4.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00215	ug/L	116	(50-150)		
MS_202009030440	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00228	ug/L	103	(50-150)		
DUP_202009030441	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0266	ug/L	107	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0272	ug/L	109	(70-130)	30	1.9

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Report: 890914  
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 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00244	ug/L	122	(50-150)		
MS_202009030440	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00382	ug/L	118	(50-150)		
DUP_202009030441	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0276	ug/L	110	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0321	ug/L	128	(70-130)	30	15
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202009030440	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00299	ug/L	96	(50-150)		
DUP_202009030441	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0221	ug/L	89	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0220	ug/L	88	(70-130)	30	0.45
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00185	ug/L	93	(50-150)		
MS_202009030440	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00189	ug/L	54	(50-150)		
DUP_202009030441	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0242	ug/L	97	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0240	ug/L	96	(70-130)	30	0.83
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00209	ug/L	104	(50-150)		
MS_202009030440	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00226	ug/L	77	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1273351 Analytical Batch: 1273976

Analysis Date: 09/10/2020

DUP_202009030452	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0237	ug/L	101	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0241	ug/L	102	(70-130)	30	1.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00178	ug/L	95	(50-150)		
MS2_202009030450	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0471	ug/L	100	(70-130)		
DUP_202009030452	13C2-PFDA (S)			92.3	%	92	(70-130)		
LCS1	13C2-PFDA (S)		100	89.8	%	90	(70-130)		
LCS2	13C2-PFDA (S)		100	93.2	%	93	(70-130)		
MBLK	13C2-PFDA (S)			85.1	%	85	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	90.7	%	91	(70-130)		
MS2_202009030450	13C2-PFDA (S)		100	95.8	%	96	(70-130)		
DUP_202009030452	13C2-PFHxA (S)			93.5	%	93	(70-130)		
LCS1	13C2-PFHxA (S)		100	95.9	%	96	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	13C2-PFHxA (S)		100	103	%	103	(70-130)		
MBLK	13C2-PFHxA (S)			87.5	%	88	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	98.1	%	98	(70-130)		
MS2_202009030450	13C2-PFHxA (S)		100	96.2	%	96	(70-130)		
DUP_202009030452	13C2-PFOA- IS#1 (I)			120	%	121	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	115	%	115	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			122	%	122	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	112	%	113	(50-150)		
MS2_202009030450	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
DUP_202009030452	13C3-HFPO-DA (S)			89.0	%	89	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	84.0	%	84	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	93.0	%	93	(70-130)		
MBLK	13C3-HFPO-DA (S)			74.1	%	74	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	90.9	%	91	(70-130)		
MS2_202009030450	13C3-HFPO-DA (S)		100	93.2	%	93	(70-130)		
DUP_202009030452	13C4-PFOS- IS#2 (I)			116	%	116	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	108	%	109	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			112	%	112	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
MS2_202009030450	13C4-PFOS- IS#2 (I)		100	109	%	109	(50-150)		
DUP_202009030452	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0250	ug/L	106	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0261	ug/L	111	(70-130)	30	4.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00201	ug/L	107	(50-150)		
MS2_202009030450	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0490	ug/L	101	(70-130)		
DUP_202009030452	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0250	ug/L	108	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0255	ug/L	109	(70-130)	30	2.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00192	ug/L	103	(50-150)		
MS2_202009030450	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0489	ug/L	105	(70-130)		
DUP_202009030452	d3-NMeFOSAA (I)			107	%	107	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MBLK	d3-NMeFOSAA (I)			104	%	104	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 890914  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MS2_202009030450	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
DUP_202009030452	d5-NEtFOSAA (S)			97.0	%	97	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	95.5	%	95	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	97.8	%	98	(70-130)		
MBLK	d5-NEtFOSAA (S)			96.7	%	97	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	94.4	%	94	(70-130)		
MS2_202009030450	d5-NEtFOSAA (S)		100	97.0	%	97	(70-130)		
DUP_202009030452	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0233	ug/L	93	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0272	ug/L	109	(70-130)	30	15
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00207	ug/L	104	(50-150)		
MS2_202009030450	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0519	ug/L	104	(70-130)		
DUP_202009030452	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0273	ug/L	109	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0276	ug/L	111	(70-130)	30	1.1
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00217	ug/L	109	(50-150)		
MS2_202009030450	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0544	ug/L	109	(70-130)		
DUP_202009030452	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0274	ug/L	110	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0267	ug/L	107	(70-130)	30	2.6
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	106	(50-150)		
MS2_202009030450	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0527	ug/L	105	(70-130)		
DUP_202009030452	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0250	ug/L	113	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0256	ug/L	116	(70-130)	30	2.4
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00193	ug/L	109	(50-150)		
MS2_202009030450	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0471	ug/L	106	(70-130)		
DUP_202009030452	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0253	ug/L	101	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0255	ug/L	102	(70-130)	30	0.79
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00202	ug/L	101	(50-150)		
MS2_202009030450	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0511	ug/L	102	(70-130)		

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Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202009030452	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0247	ug/L	99	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0251	ug/L	101	(70-130)	30	1.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00198	ug/L	99	(50-150)		
MS2_202009030450	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0488	ug/L	98	(70-130)		
DUP_202009030452	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0279	ug/L	112	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0290	ug/L	116	(70-130)	30	3.9
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00224	ug/L	112	(50-150)		
MS2_202009030450	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0526	ug/L	104	(70-130)		
DUP_202009030452	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0257	ug/L	113	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0259	ug/L	114	(70-130)	30	0.78
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00201	ug/L	110	(50-150)		
MS2_202009030450	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0500	ug/L	110	(70-130)		
DUP_202009030452	Perfluorohexanoic acid (PFHxA)	0.0052		0.00527	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0290	ug/L	116	(70-130)	30	6.4
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00230	ug/L	115	(50-150)		
MS2_202009030450	Perfluorohexanoic acid (PFHxA)	0.0040	0.05	0.0581	ug/L	108	(70-130)		
DUP_202009030452	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0264	ug/L	106	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0272	ug/L	109	(70-130)	30	3.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00213	ug/L	107	(50-150)		
MS2_202009030450	Perfluorononanoic acid (PFNA)	ND	0.05	0.0528	ug/L	106	(70-130)		
DUP_202009030452	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0259	ug/L	112	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0257	ug/L	111	(70-130)	30	0.78
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00200	ug/L	108	(50-150)		
MS2_202009030450	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0508	ug/L	110	(70-130)		
DUP_202009030452	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0280	ug/L	112	(70-130)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 890914  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0286	ug/L	114	(70-130)	30	1.8
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00237	ug/L	119	(50-150)		
MS2_202009030450	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0556	ug/L	111	(70-130)		
DUP_202009030452	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0264	ug/L	105	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0280	ug/L	112	(70-130)	30	5.9
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00268	ug/L	134	(50-150)		
MS2_202009030450	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0498	ug/L	100	(70-130)		
DUP_202009030452	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0246	ug/L	99	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0255	ug/L	102	(70-130)	30	3.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00195	ug/L	98	(50-150)		
MS2_202009030450	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0490	ug/L	98	(70-130)		
DUP_202009030452	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0243	ug/L	97	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0253	ug/L	101	(70-130)	30	4.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00196	ug/L	98	(50-150)		
MS2_202009030450	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0499	ug/L	100	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Fecal Coliform Small, Fecal Coliform Large), MPN/100 mL (Fecal Coliform), Presence/Absence (P/A)\* (Fecal Coliform)

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 09/15/2020

Quant Report - Page 1 of 1

, Tel Fax



Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Pos Tubes (Tot, E., Coli), MPN/100ml (Tot, E., Coli), Pres/Abs (P/A)\* (Tot, E., Coli)

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required:
Comment:
Approved by:

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 09/15/2020

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_

Project: \_\_\_\_\_  
 Phone #: \_\_\_\_\_  
 Date Received: \_\_\_\_\_  
 Sampled By: \_\_\_\_\_  
 Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
 P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)\*

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required

Approved by

Date of Issue: 09/15/2020

Quant Report - Page 1 of 1

Tel Fax

## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-38020-1  
Client Project/Site: 890914 - WRD

For:  
Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:  
9/15/2020 8:25:33 AM

Lori Thompson, Project Manager I  
(714)895-5494  
[Lori.Thompson@eurofinset.com](mailto:Lori.Thompson@eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 890914 - WRD

Job ID: 570-38020-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⊠	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 890914 - WRD

Job ID: 570-38020-1

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**Job ID: 570-38020-1**

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**Laboratory: Eurofins Calscience LLC**

---

**Narrative**

**Job Narrative**  
**570-38020-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 9/9/2020 10:45 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.2° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Eurofins Eaton Analytical  
Project/Site: 890914 - WRD

Job ID: 570-38020-1

**Client Sample ID: 202009030444**

**Lab Sample ID: 570-38020-1**

No Detections.

**Client Sample ID: 202009030453**

**Lab Sample ID: 570-38020-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM-SGT: Oil and Grease	1.56		1.20	0.968	mg/L	1		1664A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 890914 - WRD

Job ID: 570-38020-1

## General Chemistry

Client Sample ID: 202009030444

Date Collected: 09/03/20 08:30

Date Received: 09/09/20 10:45

Lab Sample ID: 570-38020-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM-SGT: Oil and Grease	ND		1.20	0.964	mg/L		09/11/20 07:07	09/11/20 07:07	1

Client Sample ID: 202009030453

Date Collected: 09/03/20 11:55

Date Received: 09/09/20 10:45

Lab Sample ID: 570-38020-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM-SGT: Oil and Grease	1.56		1.20	0.968	mg/L		09/11/20 07:07	09/11/20 07:07	1

# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 890914 - WRD

Job ID: 570-38020-1

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 570-93704/1-A**  
**Matrix: Water**  
**Analysis Batch: 93766**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 93704**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM-SGT: Oil and Grease	ND		1.00	0.806	mg/L		09/11/20 07:07	09/11/20 07:07	1

**Lab Sample ID: LCS 570-93704/2-A**  
**Matrix: Water**  
**Analysis Batch: 93766**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 93704**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	37.20		mg/L		93	78 - 114
HEM-SGT: Oil and Grease	20.0	18.50		mg/L		93	64 - 132

**Lab Sample ID: LCSD 570-93704/3-A**  
**Matrix: Water**  
**Analysis Batch: 93766**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 93704**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	37.70		mg/L		94	78 - 114	1	18
HEM-SGT: Oil and Grease	20.0	18.80		mg/L		94	64 - 132	2	34

**Lab Sample ID: 570-38020-1 MS**  
**Matrix: Water**  
**Analysis Batch: 93766**

**Client Sample ID: 202009030456**  
**Prep Type: Total/NA**  
**Prep Batch: 93704**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	2.87		48.3	45.77		mg/L		89	78 - 114
HEM-SGT: Oil and Grease	ND		24.2	22.83		mg/L		95	64 - 132

**Lab Sample ID: 570-38020-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 93766**

**Client Sample ID: 202009030457**  
**Prep Type: Total/NA**  
**Prep Batch: 93704**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	2.87		46.6	43.77		mg/L		88	78 - 114	4	18
HEM-SGT: Oil and Grease	ND		23.3	21.77		mg/L		94	64 - 132	5	34

**Lab Sample ID: 570-38020-2 MS**  
**Matrix: Water**  
**Analysis Batch: 93766**

**Client Sample ID: 202009030454**  
**Prep Type: Total/NA**  
**Prep Batch: 93704**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	3.61		46.8	44.44		mg/L		87	78 - 114
HEM-SGT: Oil and Grease	1.56		23.4	21.99		mg/L		94	64 - 132

**Lab Sample ID: 570-38020-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 93766**

**Client Sample ID: 202009030455**  
**Prep Type: Total/NA**  
**Prep Batch: 93704**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	3.61		43.8	41.29		mg/L		86	78 - 114	7	18
HEM-SGT: Oil and Grease	1.56		21.9	20.70		mg/L		95	64 - 132	6	34

Eurofins Calscience LLC

# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 890914 - WRD

Job ID: 570-38020-1

## General Chemistry

### Prep Batch: 93704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-38020-1	202009030444	Total/NA	Water	1664A	
570-38020-2	202009030453	Total/NA	Water	1664A	
MB 570-93704/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-93704/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-93704/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
570-38020-1 MS	202009030456	Total/NA	Water	1664A	
570-38020-1 MSD	202009030457	Total/NA	Water	1664A	
570-38020-2 MS	202009030454	Total/NA	Water	1664A	
570-38020-2 MSD	202009030455	Total/NA	Water	1664A	

### Analysis Batch: 93766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-38020-1	202009030444	Total/NA	Water	1664A	93704
570-38020-2	202009030453	Total/NA	Water	1664A	93704
MB 570-93704/1-A	Method Blank	Total/NA	Water	1664A	93704
LCS 570-93704/2-A	Lab Control Sample	Total/NA	Water	1664A	93704
LCSD 570-93704/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	93704
570-38020-1 MS	202009030456	Total/NA	Water	1664A	93704
570-38020-1 MSD	202009030457	Total/NA	Water	1664A	93704
570-38020-2 MS	202009030454	Total/NA	Water	1664A	93704
570-38020-2 MSD	202009030455	Total/NA	Water	1664A	93704

# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 890914 - WRD

Job ID: 570-38020-1

**Client Sample ID: 202009030444**

**Lab Sample ID: 570-38020-1**

**Date Collected: 09/03/20 08:30**

**Matrix: Water**

**Date Received: 09/09/20 10:45**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			836 mL	1000 mL	93704	09/11/20 07:07	ULIN	ECL 1
Total/NA	Analysis	1664A		1			93766	09/11/20 07:07	ULIN	ECL 1

Instrument ID: NOEQUIP

**Client Sample ID: 202009030453**

**Lab Sample ID: 570-38020-2**

**Date Collected: 09/03/20 11:55**

**Matrix: Water**

**Date Received: 09/09/20 10:45**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			832 mL	1000 mL	93704	09/11/20 07:07	ULIN	ECL 1
Total/NA	Analysis	1664A		1			93766	09/11/20 07:07	ULIN	ECL 1

Instrument ID: NOEQUIP

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 890914 - WRD

Job ID: 570-38020-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

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# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 890914 - WRD

Job ID: 570-38020-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

**Protocol References:**

1664A = EPA-821-98-002

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 890914 - WRD

Job ID: 570-38020-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-38020-1	202009030444	Water	09/03/20 08:30	09/09/20 10:45	
570-38020-2	202009030453	Water	09/03/20 11:55	09/09/20 10:45	

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**Submittal Form**  
Date: 9/8/2020

**\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!**  
Report & Invoice must have the Folder # 890914 Job # 1000014

**eurolfins**  
Eaton Analytical

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature.

Reports: Jackie Contreras Sub-Contracting Administrator  
EMAIL TO: us20\_subcontract@eurofins.com  
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
Phone (626) 386-1165 Fax (626) 386-1122  
Invoices to: Eurofins Eaton Analytical, LLC  
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

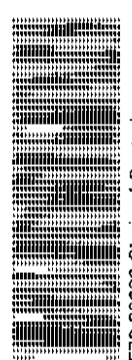
Ship To  
Eurofins CalScience  
7440 Lincoln Way  
Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 890914 Report Due: 09/18/2020

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix.  
Samples from: CALIFORNIA

WRD: please see sample description for MS/MSD samples



570-38020 Chain of Custody

Client Sample ID for reference onl  
LH-INF-20200903

Sample ID: 202009030444  
Sample type: JLS  
Sample Event: Analysis Requested  
Prep Method: Oil and Grease by 1664 HEM SGT  
Sample Date & Time Matrix: 09/03/20 0830 DW  
PWS Systemcode: PWSID  
Static ID:

Sample ID: 202009030453  
Sample type: JLS  
Sample Event: Analysis Requested  
Prep Method: Oil and Grease by 1664 HEM SGT  
Sample Date & Time Matrix: 09/03/20 1155 DW  
PWS Systemcode: PWSID  
Static ID:

Sample ID: 202009030454  
Sample type: JLS  
Sample Event: Analysis Requested  
Prep Method: Oil and Grease by 1664 HEM SGT  
Sample Date & Time Matrix: 09/03/20 1155 DW  
PWS Systemcode: PWSID  
Static ID:

Relinquished by: *Y. Green*  
Received by: *J. P. Green*  
Relinquished by: *J. P. Green*  
Received by: *J. P. Green*

Date: 9/8/2020 Time: 12:03  
Date: 9/9/2020 Time: 10:45

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016 Tel (626) 386-1100 Fax (866) 988-3757 www.EurofinsUS.com/Eaton

Page 1 of 2  
Page 13 of 16

2-6/2.2 SGA

9/15/2020

38020

Sample ID 202009030455 **Client Sample ID for reference on!** MB-INF-20200903 MSD PWS Systemcode PWSID JLS  
 Sample type: Sample Event: Facility ID: Sample Point ID: Static ID:

Method EPA 1664 HEM-SGT **Prep Method** Analysis Requested Oil and Grease by 1664 HEM SGT

Sample ID 202009030456 **Client Sample ID for reference on!** LH-INF-20200903 MS PWS Systemcode PWSID JLS  
 Sample type: Sample Event: Facility ID: Sample Point ID: Static ID:

Method EPA 1664 HEM-SGT **Prep Method** Analysis Requested Oil and Grease by 1664 HEM SGT

Sample ID 202009030457 **Client Sample ID for reference on!** LH-INF-20200903 MSD PWS Systemcode PWSID JLS  
 Sample type: Sample Event: Facility ID: Sample Point ID: Static ID:

Method EPA 1664 HEM-SGT **Prep Method** Analysis Requested Oil and Grease by 1664 HEM SGT

Relinquished by: John Sample Control Date 9-8-20 Time 12:03  
 Received by: [Signature] Sample Control Date 9/9/2020 Time 10:45  
 Relinquished by: \_\_\_\_\_ Sample Control Date \_\_\_\_\_ Time \_\_\_\_\_  
 Received by: \_\_\_\_\_ Sample Control Date \_\_\_\_\_ Time \_\_\_\_\_

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgment of Receipt is requested to attn: Jackie Contreras

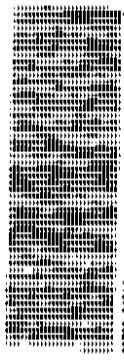
ORIGIN ID: HHPA (626) 286-1100  
MANUEL R. VASQUEZ  
EPIBIOFINS ERTON ANALYTICAL  
760 ROYAL OAKS DR SUITE 100  
MONTROVIL, CA 91016  
UNITED STATES US

SHIP DATE: 08SEP20  
RTU: 55 LB  
CNO: 0994108/CAF3313  
DIM: 24x14x14 IN

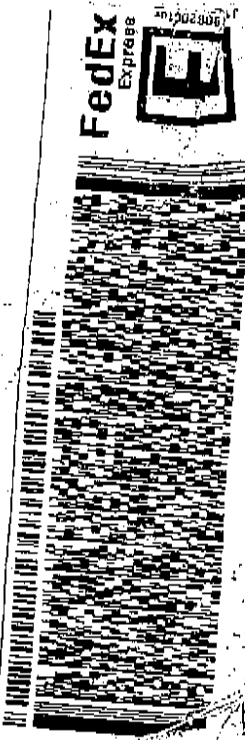
BILL SENDER

TO **SAMPLE RECEIVING**  
**CA SCIENCE ENVIRONMENTAL LAB**  
**7440 LINCOLN WAY**

**GARDEN GROVE CA 928411427**  
PO, PK  
(714) 895-6454  
DEPT: SUBOUTSLOS - IX



57U-38020 Waybill



SEP 10 30A  
WED -  
PRIO  
FRIGHT

909 8483 9026

9 APVA



# Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-38020-1

**Login Number: 38020**

**List Number: 1**

**Creator: Cruise, Noel**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)



## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 891987  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 891987  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **September 10, 2020 at 1307**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202009100507	GAC-1-20200910 Static ID: 537.1 @537.1	09/10/2020 0820
202009100508	GAC-2-20200910 Static ID: 537.1 @537.1	09/10/2020 0823
202009100509	GAC-3-20200910 Static ID: 537.1 @537.1	09/10/2020 0826
202009100510	GAC-4-20200910 Static ID: 537.1 @537.1	09/10/2020 0829
202009100511	IX-1-20200910 Static ID: 537.1 @537.1	09/10/2020 0832
202009100512	IX-2-20200910 Static ID: 537.1 @537.1	09/10/2020 0835
202009100513	IX-3-20200910 Static ID: 537.1 @537.1	09/10/2020 0838
202009100514	IX-4-20200910 Static ID: 537.1 @537.1	09/10/2020 0841
202009100515	LH-INF-20200910 @537.1 Chloride	09/10/2020 0844
	@ANIONS48 Sulfate	Alkalinity in CaCO3 units Total Organic Carbon
202009100516	GAC-5-20200910 @537.1	09/10/2020 1100
202009100517	GAC-6-20200910 @537.1	09/10/2020 1103



### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 891987  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **September 10, 2020 at 1307**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202009100518</u>	GAC-7-20200910	09/10/2020 1106
	@537.1	
<u>202009100519</u>	GAC-8-20200910	09/10/2020 1109
	@537.1	
<u>202009100520</u>	IX-5-20200910	09/10/2020 1112
	@537.1	
<u>202009100521</u>	IX-6-20200910	09/10/2020 1115
	@537.1	
<u>202009100522</u>	IX-7-20200910	09/10/2020 1118
	@537.1	
<u>202009100523</u>	IX-8-20200910	09/10/2020 1121
	@537.1	
<u>202009100524</u>	MB-INF-20200910	09/10/2020 1124
	@537.1	
	Chloride	
	@ANIONS48	Alkalinity in CaCO3 units
	Sulfate	Total Organic Carbon

#### Test Description

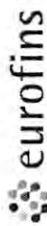
@537.1 -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

*88198A*

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302								
LABORATORY: Eurofins Eaton Analytical		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang								
TEL: (949) 679-1070		E-MAIL: mjeon@gsi-net.com		SAMPLER(S): (PRINT) <i>BC</i>								
<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.												
LAB USE ONLY	SAMPLE ID	SAMPLING TIME		NO. OF CONT.	Matrix	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	Date:	Time:
		DATE	TIME									
	GAC-1 - 20200910	9/10/20	820	2	Water	Unpreserved	X				9/10/20	1306
	GAC-2 - 20200910		823	1	Water	Preserved	X				9/10/20	1307
	GAC-3 - 20200910		826	1	Water		X					
	GAC-4 - 20200910		829	1	Water		X					
	IX-1 - 20200910		832	1	Water		X					
	IX-2 - 20200910		835	1	Water		X					
	IX-3 - 20200910		838	1	Water		X					
	IX-4 - 20200910		841	1	Water		X					
	LH-INF - 20200910		844	5	Water	Unpreserved	X	X	X	X		
	LH-INF-DUP <i>bc</i>				Water							
	GAC-5 - 20200910	9/10/20	1100	2	Water	Unpreserved	X				9/10/20	1306
	GAC-6 - 20200910		1103	1	Water	Preserved	X				9/10/20	1307
	GAC-7 - 20200910		1106	1	Water		X					
	GAC-8 - 20200910		1109	1	Water		X					
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature)				Date: 9/10/20		Time: 1306
Relinquished by: (Signature)						Received by: (Signature)				Date: 9/10/20		Time: 1307
Relinquished by: (Signature)						Received by: (Signature)				Date: 9/10/20		Time: 1307





Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 51997

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

### SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 604 (Observation = 6.1 °C) (Corr. Factor = 2 °C) (Final = 15.9 °C)

TYPE OF ICE: Real  Synthetic  No Ice  CONDITION OF ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	2 = (Observation= _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)
3 = (Observation= _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	4 = (Observation= _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

7) VOA and Radon Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

### Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 615.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: [Signature] SIGNATURE: [Signature] PRINT NAME: Eurofins Eaton Analytical

DATE: 9/10/20 TIME: 13:07

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 891987  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

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 Project: 0250000  
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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
09/14/2020 19:30	Perfluorohexanoic acid (PFHxA)	<b>202009100511 IX-1-20200910</b>	0.0022		ug/L	0.0020
09/14/2020 19:39	Perfluorohexanoic acid (PFHxA)	<b>202009100512 IX-2-20200910</b>	0.0036		ug/L	0.0020
09/14/2020 19:49	Perfluorohexanoic acid (PFHxA)	<b>202009100513 IX-3-20200910</b>	0.0037		ug/L	0.0020
09/14/2020 19:59	Perfluorohexanoic acid (PFHxA)	<b>202009100514 IX-4-20200910</b>	0.0035		ug/L	0.0020
09/17/2020 21:12	Alkalinity in CaCO3 units	<b>202009100515 LH-INF-20200910</b>	200		mg/L	2.0
09/10/2020 19:56	Chloride		110	250	mg/L	2.5
09/10/2020 19:56	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
09/10/2020 19:56	Nitrate as NO3 (calc)		12	45	mg/L	2.2
09/14/2020 20:18	Perfluorobutanesulfonic acid (PFBS)		0.0062		ug/L	0.0020
09/14/2020 20:18	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
09/14/2020 20:18	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
09/14/2020 20:18	Perfluorononanoic acid (PFNA)		0.0031		ug/L	0.0020
09/14/2020 20:18	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
09/14/2020 20:18	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
09/10/2020 19:56	Sulfate		180	250	mg/L	2.5
09/10/2020 19:56	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
09/18/2020 03:05	Total Organic Carbon		0.78		mg/L	0.20
09/14/2020 20:27	Perfluorobutanesulfonic acid (PFBS)	<b>202009100516 GAC-5-20200910</b>	0.0040		ug/L	0.0020
09/14/2020 20:27	Perfluorohexanoic acid (PFHxA)		0.0039		ug/L	0.0020
09/14/2020 20:27	Perfluorooctanoic acid (PFOA)		0.0024		ug/L	0.0020
09/14/2020 20:46	Perfluorobutanesulfonic acid (PFBS)	<b>202009100518 GAC-7-20200910</b>	0.0051		ug/L	0.0020
09/14/2020 20:46	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
09/14/2020 18:32	Perfluorohexanoic acid (PFHxA)	<b>202009100520 IX-5-20200910</b>	0.0028		ug/L	0.0020
09/14/2020 20:56	Perfluorohexanoic acid (PFHxA)	<b>202009100521 IX-6-20200910</b>	0.0050		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

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Samples Received on:  
 09/10/2020 1307

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202009100522</b>				
		<b><u>IX-7-20200910</u></b>				
09/14/2020 21:05	Perfluorohexanoic acid (PFHxA)		0.0048		ug/L	0.0020
		<b>202009100523</b>				
		<b><u>IX-8-20200910</u></b>				
09/14/2020 21:15	Perfluorohexanoic acid (PFHxA)		0.0056		ug/L	0.0020
		<b>202009100524</b>				
		<b><u>MB-INF-20200910</u></b>				
09/17/2020 20:38	Alkalinity in CaCO3 units		170		mg/L	2.0
09/10/2020 20:35	Chloride		47	250	mg/L	2.5
09/10/2020 20:35	Nitrate as Nitrogen by IC		2.7	10	mg/L	0.50
09/10/2020 20:35	Nitrate as NO3 (calc)		12	45	mg/L	2.2
09/14/2020 21:25	Perfluorobutanesulfonic acid (PFBS)		0.0087		ug/L	0.0020
09/14/2020 21:25	Perfluoroheptanoic acid (PFHpA)		0.0042		ug/L	0.0020
09/14/2020 21:25	Perfluorohexanesulfonic acid (PFHxS)		0.0065		ug/L	0.0020
09/14/2020 21:25	Perfluorohexanoic acid (PFHxA)		0.0059		ug/L	0.0020
09/14/2020 21:25	Perfluorononanoic acid (PFNA)		0.0037		ug/L	0.0020
09/14/2020 21:25	Perfluorooctanesulfonic acid (PFOS)		0.036		ug/L	0.0020
09/14/2020 21:25	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
09/10/2020 20:35	Sulfate		75	250	mg/L	2.5
09/10/2020 20:35	Total Nitrate, Nitrite-N, CALC		2.7		mg/L	0.10
09/18/2020 03:22	Total Organic Carbon		0.92		mg/L	0.20

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**Water Replenishment District**  
 Joseph Liles  
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Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20200910 (202009100507)</b>					<b>Sampled on 09/10/2020 0820</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	13C2-PFDA	82	%		1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	13C2-PFHxA	98	%		1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	114	%		1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	89	%		1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	104	%		1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	d5-NEFOSAA	94	%		1

<b>GAC-2-20200910 (202009100508)</b>					<b>Sampled on 09/10/2020 0823</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



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 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	13C2-PFDA	72	%		1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	13C2-PFHxA	87	%		1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	130	%		1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	77	%		1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	106	%		1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**GAC-3-20200910 (202009100509)**

Sampled on 09/10/2020 0826

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 Joseph Liles  
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 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	13C2-PFDA	76	%		1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	13C2-PFHxA	91	%		1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	125	%		1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	81	%		1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	106	%		1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**GAC-4-20200910 (202009100510)**

Sampled on 09/10/2020 0829

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 891987  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	13C2-PFDA	79	%		1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	13C2-PFHxA	92	%		1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	83	%		1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	104	%		1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**IX-1-20200910 (202009100511)**

Static ID: 537.1

Sampled on 09/10/2020 0832

**EPA 537.1 - EPA Method 537.1**

09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0022	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 891987  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	13C2-PFDA	80	%		1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	13C2-PFHxA	92	%		1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	127	%		1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	82	%		1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	112	%		1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	92	%		1

**IX-2-20200910 (202009100512)**

**Sampled on 09/10/2020 0835**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	13C2-PFDA	104	%		1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	13C2-PFHxA	93	%		1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	129	%		1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	82	%		1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	120	%		1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	121	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 891987  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	126	%		1
<b>IX-3-20200910 (202009100513)</b>						<b>Sampled on 09/10/2020 0838</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	13C2-PFDA	84	%		1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	13C2-PFHxA	97	%		1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	87	%		1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	110	%		1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	114	%		1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	89	%		1

<b>IX-4-20200910 (202009100514)</b>						<b>Sampled on 09/10/2020 0841</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 891987  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0035	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	13C2-PFDA	78	%		1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	13C2-PFHxA	96	%		1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	87	%		1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	110	%		1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	112	%		1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	81	%		1

**LH-INF-20200910 (202009100515)**

**Sampled on 09/10/2020 0844**

**SM 5310C - Total Organic Carbon**

09/18/20 03:05	1275257	(SM 5310C)	Total Organic Carbon	0.78	mg/L	0.20	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

09/10/20 19:56	1273942	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
09/10/20 19:56	1273942	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
09/10/20 19:56	1273942	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
09/10/20 19:56	1273942	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

09/10/20 19:56	1273943	(EPA 300.0)	Chloride	110	mg/L	2.5	5
09/10/20 19:56	1273943	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 891987  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0062	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0031	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	13C2-PFDA	87	%		1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	13C2-PFHxA	96	%		1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	87	%		1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	113	%		1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**SM 2320B - Alkalinity in CaCO3 units**

09/17/20 21:12	1275412	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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**GAC-5-20200910 (202009100516)**

Sampled on 09/10/2020 1100

**EPA 537.1 - EPA Method 537.1**

09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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Report: 891987  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0040	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0024	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	13C2-PFDA	80	%		1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	13C2-PFHxA	92	%		1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	82	%		1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	109	%		1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	88	%		1

**GAC-6-20200910 (202009100517)**

Sampled on 09/10/2020 1103

**EPA 537.1 - EPA Method 537.1**

09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

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 1 800 566 LABS (1 800 566 5227)

Report: 891987  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	13C2-PFDA	78	%		1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	13C2-PFHxA	92	%		1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	83	%		1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	113	%		1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	89	%		1

**GAC-7-20200910 (202009100518)**

Sampled on 09/10/2020 1106

**EPA 537.1 - EPA Method 537.1**

09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0051	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 891987  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	13C2-PFDA	82	%		1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	13C2-PFHxA	96	%		1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	85	%		1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	111	%		1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	92	%		1

**GAC-8-20200910 (202009100519)**

Sampled on 09/10/2020 1109

**EPA 537.1 - EPA Method 537.1**

09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	13C2-PFDA	85	%		1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	13C2-PFHxA	101	%		1

Rounding on totals after summation.  
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 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	90	%		1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	104	%		1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	96	%		1

**IX-5-20200910 (202009100520)**

**Sampled on 09/10/2020 1112**

**EPA 537.1 - EPA Method 537.1**

09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0028	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	13C2-PFDA	84	%		1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	13C2-PFHxA	93	%		1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	86	%		1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	105	%		1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**IX-6-20200910 (202009100521)**

**Sampled on 09/10/2020 1115**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 891987  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 537.1 - EPA Method 537.1</b>									
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0050	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	13C2-PFDA	83	%		1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	13C2-PFHxA	93	%		1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	125	%		1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	83	%		1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	114	%		1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	115	%		1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**IX-7-20200910 (202009100522)**

Sampled on 09/10/2020 1118

<b>EPA 537.1 - EPA Method 537.1</b>									
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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 1 800 566 LABS (1 800 566 5227)

Report: 891987  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0048	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	13C2-PFDA	79	%		1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	13C2-PFHxA	83	%		1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	140	%		1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	75	%		1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	112	%		1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	116	%		1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**IX-8-20200910 (202009100523)**

Sampled on 09/10/2020 1121

**EPA 537.1 - EPA Method 537.1**

09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

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 1 800 566 LABS (1 800 566 5227)

Report: 891987  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0056	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	13C2-PFDA	86	%		1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	13C2-PFHxA	97	%		1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	85	%		1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	115	%		1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**MB-INF-20200910 (202009100524)**

Sampled on 09/10/2020 1124

**SM 5310C - Total Organic Carbon**

09/18/20 03:22	1275257	(SM 5310C)	Total Organic Carbon	0.92	mg/L	0.20	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

09/10/20 20:35	1273942	(EPA 300.0)	Nitrate as Nitrogen by IC	2.7	mg/L	0.50	5
09/10/20 20:35	1273942	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
09/10/20 20:35	1273942	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
09/10/20 20:35	1273942	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.7	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

09/10/20 20:35	1273943	(EPA 300.0)	Chloride	47	mg/L	2.5	5
09/10/20 20:35	1273943	(EPA 300.0)	Sulfate	75	mg/L	2.5	5

**EPA 537.1 - EPA Method 537.1**

09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 891987  
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**Water Replenishment District**  
 Joseph Liles  
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 Lakewood, CA 90712

Samples Received on:  
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0087	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0042	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0065	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0059	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0037	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.036	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	13C2-PFDA	85	%		1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	13C2-PFHxA	92	%		1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	82	%		1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	118	%		1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	116	%		1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	89	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	09/17/20 20:38		1275412	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.





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Report: 891987  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1273942</b>					<b>Analysis Date: 09/10/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	102	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.53	mg/L	101	(90-110)	20	0.39
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0480	mg/L	96	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0122	mg/L	98	(50-150)		
MS_202009100352	Nitrate as Nitrogen by IC	3.3	2.6	6.06	mg/L	110	(80-120)		
MS_202009100515	Nitrate as Nitrogen by IC	2.8	6.5	9.45	mg/L	106	(80-120)		
MSD_202009100352	Nitrate as Nitrogen by IC	3.3	2.6	6.07	mg/L	110	(80-120)	20	0.22
MSD_202009100515	Nitrate as Nitrogen by IC	2.8	6.5	9.51	mg/L	107	(80-120)	20	0.59
LCS1	Nitrite Nitrogen by IC		1	1.04	mg/L	104	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.04	mg/L	104	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0497	mg/L	99	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0137	mg/L	110	(50-150)		
MS_202009100352	Nitrite Nitrogen by IC	ND	1	1.04	mg/L	104	(80-120)		
MS_202009100515	Nitrite Nitrogen by IC	ND	2.5	2.58	mg/L	103	(80-120)		
MSD_202009100352	Nitrite Nitrogen by IC	ND	1	1.05	mg/L	105	(80-120)	20	0.82
MSD_202009100515	Nitrite Nitrogen by IC	ND	2.5	2.60	mg/L	104	(80-120)	20	0.63
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1273943</b>					<b>Analysis Date: 09/10/2020</b>				
LCS1	Chloride		25	26.4	mg/L	106	(90-110)		
LCS2	Chloride		25	26.3	mg/L	105	(90-110)	20	0.38
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.446	mg/L	89	(50-150)		
MS_202009100515	Chloride	110	65	178	mg/L	109	(80-120)		
MS_202009110264	Chloride	70	26	95.9	mg/L	104	(80-120)		
MSD_202009100515	Chloride	110	65	179	mg/L	110	(80-120)	20	0.36
MSD_202009110264	Chloride	70	26	95.9	mg/L	104	(80-120)	20	0.022
LCS1	Sulfate		50	52.0	mg/L	104	(90-110)		
LCS2	Sulfate		50	51.8	mg/L	104	(90-110)	20	0.39
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.966	mg/L	97	(50-150)		
MRL_W	Sulfate		0.25	0.235	mg/L	94	(50-150)		
MS_202009100515	Sulfate	180	125	316	mg/L	109	(80-120)		

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 891987  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202009110264	Sulfate	160	50	ND	mg/L	104	(80-120)		
MSD_202009100515	Sulfate	180	125	317	mg/L	110	(80-120)	20	0.33
MSD_202009110264	Sulfate	160	50	ND	mg/L	104	(80-120)	20	0.20

EPA Method 537.1 by EPA 537.1

Prep Batch: 1273955 Analytical Batch: 1274514

Analysis Date: 09/14/2020

DUP_202009100520	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0423	ug/L	90	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0423	ug/L	90	(70-130)	30	0.0
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00171	ug/L	91	(50-150)		
MS_202009100519	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00171	ug/L	90	(50-150)		
DUP_202009100520	13C2-PFDA (S)			88.0	%	88	(70-130)		
LCS3	13C2-PFDA (S)		100	87.2	%	87	(70-130)		
LCS4	13C2-PFDA (S)		100	83.2	%	83	(70-130)		
MBLK	13C2-PFDA (S)			85.5	%	86	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	82.2	%	82	(70-130)		
MS_202009100519	13C2-PFDA (S)		100	82.1	%	82	(70-130)		
DUP_202009100520	13C2-PFHxA (S)			97.9	%	98	(70-130)		
LCS3	13C2-PFHxA (S)		100	105	%	105	(70-130)		
LCS4	13C2-PFHxA (S)		100	100	%	100	(70-130)		
MBLK	13C2-PFHxA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	99.2	%	99	(70-130)		
MS_202009100519	13C2-PFHxA (S)		100	99.9	%	100	(70-130)		
DUP_202009100520	13C2-PFOA- IS#1 (I)			117	%	117	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS_202009100519	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
DUP_202009100520	13C3-HFPO-DA (S)			88.4	%	88	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	93.1	%	93	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	89.7	%	90	(70-130)		
MBLK	13C3-HFPO-DA (S)			90.5	%	91	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	86.4	%	86	(70-130)		
MS_202009100519	13C3-HFPO-DA (S)		100	88.9	%	89	(70-130)		
DUP_202009100520	13C4-PFOS- IS#2 (I)			111	%	111	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	98.7	%	99	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 891987  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	13C4-PFOS- IS#2 (I)		100	99.6	%	100	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.9	%	99	(50-150)		
MS_202009100519	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
DUP_202009100520	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0478	ug/L	99	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0476	ug/L	98	(70-130)	30	0.42
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00210	ug/L	111	(50-150)		
MS_202009100519	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00223	ug/L	117	(50-150)		
DUP_202009100520	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0435	ug/L	93	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0439	ug/L	94	(70-130)	30	0.92
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00184	ug/L	99	(50-150)		
MS_202009100519	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00186	ug/L	99	(50-150)		
DUP_202009100520	d3-NMeFOSAA (I)			105	%	105	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	95.1	%	95	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	97.4	%	97	(50-150)		
MBLK	d3-NMeFOSAA (I)			102	%	102	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	89.2	%	89	(50-150)		
MS_202009100519	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
DUP_202009100520	d5-NEtFOSAA (S)			93.5	%	93	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	90.3	%	90	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	91.6	%	92	(70-130)		
MBLK	d5-NEtFOSAA (S)			90.6	%	91	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	94.2	%	94	(70-130)		
MS_202009100519	d5-NEtFOSAA (S)		100	89.6	%	90	(70-130)		
DUP_202009100520	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0472	ug/L	95	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0477	ug/L	95	(70-130)	30	1.1
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00204	ug/L	102	(50-150)		
MS_202009100519	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00221	ug/L	110	(50-150)		
DUP_202009100520	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0474	ug/L	95	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0488	ug/L	98	(70-130)	30	2.9
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 891987  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00217	ug/L	108	(50-150)		
MS_202009100519	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00221	ug/L	109	(50-150)		
DUP_202009100520	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0487	ug/L	97	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0489	ug/L	98	(70-130)	30	0.41
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00222	ug/L	111	(50-150)		
MS_202009100519	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00229	ug/L	112	(50-150)		
DUP_202009100520	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0452	ug/L	102	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0456	ug/L	103	(70-130)	30	0.88
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00196	ug/L	111	(50-150)		
MS_202009100519	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00273	ug/L	133	(50-150)		
DUP_202009100520	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0449	ug/L	90	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0457	ug/L	91	(70-130)	30	1.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00190	ug/L	95	(50-150)		
MS_202009100519	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00199	ug/L	98	(50-150)		
DUP_202009100520	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0426	ug/L	85	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0416	ug/L	83	(70-130)	30	2.4
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00174	ug/L	87	(50-150)		
MS_202009100519	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00178	ug/L	88	(50-150)		
DUP_202009100520	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0522	ug/L	104	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0535	ug/L	107	(70-130)	30	2.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00233	ug/L	116	(50-150)		
MS_202009100519	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00264	ug/L	130	(50-150)		
DUP_202009100520	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0484	ug/L	106	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0495	ug/L	109	(70-130)	30	2.3
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00207	ug/L	114	(50-150)		
MS_202009100519	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00230	ug/L	125	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202009100520	Perfluorohexanoic acid (PFHxA)	0.0028		0.00290	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0522	ug/L	104	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0543	ug/L	109	(70-130)	30	3.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202009100519	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00330	ug/L	139	(50-150)		
DUP_202009100520	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0487	ug/L	97	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0494	ug/L	99	(70-130)	30	1.6
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00213	ug/L	107	(50-150)		
MS_202009100519	Perfluorononanoic acid (PFNA)	ND	0.002	0.00228	ug/L	113	(50-150)		
DUP_202009100520	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0479	ug/L	104	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0490	ug/L	106	(70-130)	30	2.3
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00208	ug/L	112	(50-150)		
MS_202009100519	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00260	ug/L	92	(50-150)		
DUP_202009100520	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0503	ug/L	101	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0502	ug/L	100	(70-130)	30	0.20
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00222	ug/L	111	(50-150)		
MS_202009100519	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00258	ug/L	123	(50-150)		
DUP_202009100520	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0512	ug/L	102	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0522	ug/L	104	(70-130)	30	1.9
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00213	ug/L	106	(50-150)		
MS_202009100519	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00218	ug/L	106	(50-150)		
DUP_202009100520	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0420	ug/L	84	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0414	ug/L	83	(70-130)	30	1.4
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00173	ug/L	86	(50-150)		
MS_202009100519	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00177	ug/L	87	(50-150)		
DUP_202009100520	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0449	ug/L	90	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 891987  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0455	ug/L	91	(70-130)	30	1.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00186	ug/L	93	(50-150)		
MS_202009100519	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00199	ug/L	98	(50-150)		

**Total Organic Carbon by SM 5310C**

**Analytical Batch: 1275257**

**Analysis Date: 09/18/2020**

LCS1	Total Organic Carbon		5	5.11	mg/L	102	(90-110)		
LCS2	Total Organic Carbon		5	5.14	mg/L	103	(90-110)	20	0.59
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.279	mg/L	140	(50-150)		
MS_202009030014	Total Organic Carbon	3.3	4	7.36	mg/L	101	(80-120)		
MSD_202009030014	Total Organic Carbon	3.3	4	7.47	mg/L	104	(80-120)	20	1.5

**Alkalinity in CaCO3 units by SM 2320B**

**Analytical Batch: 1275412**

**Analysis Date: 09/17/2020**

LCS1	Alkalinity in CaCO3 units		100	99.0	mg/L	99	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.9	mg/L	100	(90-110)	20	0.91
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.78	mg/L	89	(50-150)		
MS_202008210443	Alkalinity in CaCO3 units	220	100	297	mg/L	<u>77</u>	(80-120)		
MS_202009090265	Alkalinity in CaCO3 units	110	100	188	mg/L	80	(80-120)		
MSD_202008210443	Alkalinity in CaCO3 units	220	100	294	mg/L	<u>74</u>	(80-120)	20	1.1
MSD_202009090265	Alkalinity in CaCO3 units	110	100	191	mg/L	83	(80-120)	20	1.8

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 09/18/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 09/18/2020

, Tel Fax



**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 09/18/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn:

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:

Colilert Report - Page 1 of 1

**Report of Analysis by 24-Hour Colilert Test for  
Presence or Absence, Quantification of Total Coliform and E. Coli  
By Quantitray**

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 09/18/2020

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)



## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 893261  
Project: 0250000  
Group: WRD Pilot [Set #1]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 893261  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **September 17, 2020 at 1302**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202009170160</u>	GAC-1-20200917	09/17/2020 0803
	@537.1	
<u>202009170161</u>	GAC-2-20200917	09/17/2020 0806
	@537.1	
<u>202009170162</u>	GAC-3-20200917	09/17/2020 0809
	@537.1	
<u>202009170163</u>	GAC-4-20200917	09/17/2020 0812
	@537.1	
<u>202009170164</u>	IX-1-20200917	09/17/2020 0815
	@537.1	
<u>202009170165</u>	IX-2-20200917	09/17/2020 0818
	@537.1	
<u>202009170166</u>	IX-3-20200917	09/17/2020 0821
	@537.1	
<u>202009170167</u>	IX-4-20200917	09/17/2020 0824
	@537.1	
<u>202009170169</u>	LH-INF-20200917	09/17/2020 0827
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS
	Chloride	Calcium Total ICAP
	Hexavalent chromium(Dissolved)	Iron Total ICAP
	Magnesium Total ICAP	Oil and Grease by 1664(subbed)
	Manganese Total ICAP/MS	Sodium Total ICAP
	Perchlorate	Potassium Total ICAP
	Sulfate	Total Dissolved Solid (TDS)
	Total Hardness as CaCO3 by ICP	Total Suspended Solids (TSS)
	Total Organic Carbon	Uranium by ICPMS as pCi/L
	Uranium ICAP/MS	
<u>202009170171</u>	GAC-5-20200917	09/17/2020 1003
	@537.1	
<u>202009170172</u>	GAC-6-20200917	09/17/2020 1006

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 893261  
Project: 0250000  
Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

The following samples were received from you on **September 17, 2020 at 1302**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202009170173	GAC-7-20200917	09/17/2020 1009
	@537.1	
202009170174	GAC-8-20200917	09/17/2020 1012
	@537.1	
202009170175	IX-5-20200917	09/17/2020 1015
	@537.1	
202009170176	IX-6-20200917	09/17/2020 1018
	@537.1	
202009170177	IX-7-20200917	09/17/2020 1021
	@537.1	
202009170178	IX-8-20200917	09/17/2020 1024
	@537.1	
202009170179	MB-INF-20200917	09/17/2020 1027
	@537.1	
	Alkalinity in CaCO3 units	@ANIONS48
	Chloride	Arsenic Total ICAP/MS
	Magnesium Total ICAP	Hexavalent chromium(Dissolved)
	Perchlorate	Manganese Total ICAP/MS
	Sulfate	Potassium Total ICAP
	Total Organic Carbon	Total Dissolved Solid (TDS)
	Uranium ICAP/MS	Total Suspended Solids (TSS)
		@VOASDWA
		Calcium Total ICAP
		Iron Total ICAP
		Oil and Grease by 1664(subbed)
		Sodium Total ICAP
		Total Hardness as CaCO3 by ICP
		Uranium by ICPMS as pCi/L
202009170180	MB-INF-DUP-20200917	09/17/2020 1030
	@537.1	
202009170181	FB - 20200917 - HOLD	09/17/2020 1033
	@537.1 FB	

#### Test Description

@537.1 -- EPA Method 537.1



### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 893261  
Project: 0250000  
Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

---

The following samples were received from you on **September 17, 2020 at 1302**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

---

Sample #	Sample ID	Sample Date
	@537.1 FB -- EPA Method 537.1	
	@ANIONS48 -- Nitrate, Nitrite by EPA 300.0	
	@VOASDWA -- Volatile Organics by GCMS	

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893261

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302																					
LABORATORY: Eurofins Eaton Analytical E-MAIL: mjeon@gsi-net.com		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang																					
TEL: (949) 679-1070		GLOBAL ID:		SAMPLER(S): (PRINT) RDT																					
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.																							
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results																									
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)				
		DATE	TIME																						
	GAC-1 - 20200917	9-17	0803	Water	2				X																
	GAC-2 - 20200917		0806	Water	2				X																
	GAC-3 - 20200917		0809	Water	2				X																
	GAC-4 - 20200917		0812	Water	2				X																
	IX-1 - 20200917		0815	Water	2				X																
	IX-2 - 20200917		0818	Water	2				X																
	IX-3 - 20200917		0821	Water	2				X																
	IX-4 - 20200917		0824	Water	2				X																
	LH-INF-20200917		0827	Water	14				X																
	LH-INF-DUP			Water																					
	GAC-5 - 20200917	9-17	1003	Water	2				X																
	GAC-6 - 20200917		1006	Water	2				X																
	GAC-7 - 20200917		1009	Water	2				X																
	GAC-8 - 20200917		1012	Water	2				X																
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 9-17-2020		Time: 1301																			
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 9-17-2020		Time: 1302																			
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: <i>[Signature]</i>		Time: <i>[Signature]</i>																			



# INTERNAL CHAIN OF CUSTODY RECORD

**eurofins** | Eaton Analytical

EEA Folder Number: 893261

**SAMPLE TEMP RECEIVED:**

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 631 (Observation = 2.8 °C) (Corr. Factor = 0.1 °C) (Final = 2.7 °C)

TYPE OF ICE: Real  Synthetic  No Ice  CONDITION OF ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

**Compliance Acceptance Criteria:**

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) VOA and Radon Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

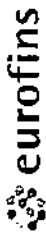
**Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)**

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Sample ID	Bottle #	None/<6	>6mm	Sample ID	Bottle #	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: Chuck Boeh SIGNATURE: Chuck Boeh PRINT NAME: Chuck Boeh COMPANY/TITLE: Eurofins Eaton Analytical DATE: 9.17.20 TIME: 1302



Eaton Analytical

**Kit Order for Water Replenishment District**  
Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3529  
(626) 386-1100 FAX (866) 988-3757

Created Date & Time: 8/21/2020 4:17:12PM

**Note: Sampler Please return this paper with your samples**

Client ID: WRD



Project Code: 0250000 Bottle Orders  
Group Name: WRD Pilot (Set #1)  
PO#/JOB#:

Description: WRD Pilot (Set #1)

Shipping Method: Pickup by client



Kit #: 271020

Created By: Anisha Zachariah - [ZR4B]  
Deliver By: 09/03/2020  
STG: Bottle Orders  
Ice Type: G

**Ship Sample Kits to**  
GSI Environmental Inc.  
  
Attr: Robert Torres  
Phone: 951-616-8406

**Send Report to**  
Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
  
Attr: Joseph Liles  
Phone: 562-275-4226

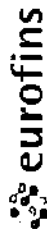
**Billing Address**  
Water Replenishment District  
  
Attr: Eurofins Calscience  
  
Water Replenishment District  
4040 Paramount Blvd  
Lakewood, CA 90712  
  
Attr: Brian Parlington  
Phone: 562-275-4249  
Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
2	Total Organic Carbon 1 - 125ml amber glass [ 0.5 ml H2SO4 (50%) ]	2	UN1830
2	Hexavalent Chromium (Dissolved) 1 - 125ml poly [ 1.25 ml NH4SO4/NH4OH buffer ]	2	
2	@ANIONS48, Chloride, Sulfate 1 - 125ml poly [ no preservative ]	2	
2	Perchlorate 1 - 125ml poly [ no preservative ]	2	
2	Oil and Grease by 1664(subbed) 2 - 1L amber glass [ H2SO4 4 ml 50% H2SO4 & 4C ]	4	
2	Alkalinity in CaCO3 units 1 - 250ml poly [ no preservative ]	2	
4	@537.1 2 - 275 ml polyprop w polypro cap [ 1.4 g Trisma ]	8	
2	@VOASDWA 3 - 40ml amber glass vial [ 4drips 6N HCL (36%) ]	6	UN1789
2	Arsenic Total ICAP/MS, Calcium Total ICAP, Iron Total ICAP, Magnesium Total ICAP, Manganese Total ICAP/MS, Potassium Total ICAP, Sodium Total ICAP, Uranium by ICP/MS as pCi/L, Uranium ICAP/MS 1 - 500ml acid poly [ 2ml HNO3 (18%) ]	2	UN2031
2	Total Dissolved Solid (TDS), Total Suspended Solids (TSS) 1 - 500ml poly [ no preservative ]	2	

**Sum Bottles: 32**

**Sum Tests: 22**

**Comments**



Eaton Analytical

Kit Order for Water Replenishment District

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
(626) 386-1100 FAX (666) 988-3757

Created Date & Time: 8/21/2020 4:17:12PM

Note: Sampler Please return this paper with your samples

Client ID: WRD

Kit #: 271020

Project Code: 0250000 Bottle Orders

Created By: Anisha Zachariah - [ZR4B]

Deliver By: 09/03/2020

STG: Bottle Orders

Ice Type: G

Group Name: WRD Pilot [Set #1]

PC#/JOB#:

Description: WRD Pilot [Set #1]

Shipping Method: Pickup by client

Ship Sample Kits to  
GSI Environmental Inc.  
Attn: Robert Torres  
Phone: 951-616-8406

Send Report to  
Water Replenishment District  
4040 Paramount Blvd  
Lakewood, CA 90712  
Attn: Joseph Liles  
Phone: 562-275-4228

Billing Address  
Water Replenishment District  
Attn: Eurofins Calscience  
Water Replenishment District  
4040 Paramount Blvd  
Lakewood, CA 90712  
Attn: Brian Partington  
Phone: 562-275-4249  
Fax: 562-921-6101

# of Sample Tests      Bottle Qty - Type [preservative information]      Total      UN DOT #

SHIPPING:

- CLIENT P/U THURSDAY, AUGUST 6TH MORNING
- PACKAGE IN 2 x 48QT COOLERS

GSI SAMPLER:

- PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COC ALONG WITH THE SAMPLES.
- NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP.

ASM:

- \*Please also send invoices to Miae Jeon (mjeon@gsi-net.com)
- \*Report copies to be sent to Miae Jeon, mjeon@gsi-net.com, Pat Galvin, pgalvin@gsi-net.com, and rdortorres@gsi-net.com.

Code      Status      Date Shipped      Via      Tracking #      # of Coolers      Prepared By

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Report:** 893261  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

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**Folder Comments**

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove, CAELAP 2944 exp 9-30-2020

**Flags Legend:**

J - Analyte is positively identified, but tentatively quantified as an estimate concentration. The analyte was either detected between MDL and MRL or did not meet any one of the required QC criteria.

LK - The associated blank spike recovery was above method acceptance limits. This target analyte was not detected in the sample.

LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.

R2 - RPD/RSD exceeded the laboratory acceptance limit. See case narrative.

R7 - LFB/LFBD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202009170164 IX-1-20200917</b>				
09/18/2020 18:57	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
		<b>202009170165 IX-2-20200917</b>				
09/18/2020 19:07	Perfluorohexanoic acid (PFHxA)		0.0035		ug/L	0.0020
		<b>202009170166 IX-3-20200917</b>				
09/18/2020 19:16	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
		<b>202009170167 IX-4-20200917</b>				
09/18/2020 19:26	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
		<b>202009170169 LH-INF-20200917</b>				
09/21/2020 22:32	Alkalinity in CaCO3 units		200		mg/L	2.0
10/02/2020 20:13	Arsenic Total ICAP/MS		3.2	10	ug/L	1.0
09/18/2020 14:03	Calcium Total ICAP		110		mg/L	1.0
09/17/2020 18:43	Chloride		110	250	mg/L	2.5
09/21/2020 13:56	Hexavalent chromium(Dissolved)		0.64		ug/L	0.020
09/18/2020 14:03	Magnesium Total ICAP		21		mg/L	0.10
09/17/2020 18:43	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
09/17/2020 18:43	Nitrate as NO3 (calc)		12	45	mg/L	2.2
09/18/2020 19:36	Perfluorobutanesulfonic acid (PFBS)		0.0065		ug/L	0.0020
09/18/2020 19:36	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
09/18/2020 19:36	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
09/18/2020 19:36	Perfluorononanoic acid (PFNA)		0.0027		ug/L	0.0020
09/18/2020 19:36	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
09/18/2020 19:36	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
09/18/2020 14:03	Potassium Total ICAP		4.6		mg/L	1.0
09/18/2020 14:03	Sodium Total ICAP		69		mg/L	1.0
09/17/2020 18:43	Sulfate		180	250	mg/L	2.5
09/23/2020 01:38	Total Dissolved Solids (TDS)		670	500	mg/L	10
09/18/2020 15:41	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
09/17/2020 18:43	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
09/25/2020 17:16	Total Organic Carbon		0.85		mg/L	0.20
10/01/2020 13:45	Uranium by ICPMS as pCi/L		3.5		pCi/L	0.70
09/30/2020 18:14	Uranium ICAP/MS		5.2	30	ug/L	1.0
		<b>202009170171 GAC-5-20200917</b>				
09/18/2020 19:56	Perfluorobutanesulfonic acid (PFBS)		0.0045		ug/L	0.0020
09/18/2020 19:56	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
09/18/2020 19:56	Perfluorooctanoic acid (PFOA)		0.0029		ug/L	0.0020
	<b>202009170172</b>	<b><u>GAC-6-20200917</u></b>				
09/18/2020 20:07	Perfluorobutanesulfonic acid (PFBS)		0.0023		ug/L	0.0020
	<b>202009170173</b>	<b><u>GAC-7-20200917</u></b>				
09/18/2020 20:17	Perfluorobutanesulfonic acid (PFBS)		0.0051		ug/L	0.0020
09/18/2020 20:17	Perfluorohexanoic acid (PFHxA)		0.0039		ug/L	0.0020
	<b>202009170175</b>	<b><u>IX-5-20200917</u></b>				
09/18/2020 20:36	Perfluorohexanoic acid (PFHxA)		0.0028		ug/L	0.0020
	<b>202009170176</b>	<b><u>IX-6-20200917</u></b>				
09/18/2020 20:45	Perfluorohexanoic acid (PFHxA)		0.0052		ug/L	0.0020
	<b>202009170177</b>	<b><u>IX-7-20200917</u></b>				
09/18/2020 20:55	Perfluoroheptanoic acid (PFHpA)		0.0025		ug/L	0.0020
09/18/2020 20:55	Perfluorohexanoic acid (PFHxA)		0.0057		ug/L	0.0020
	<b>202009170178</b>	<b><u>IX-8-20200917</u></b>				
09/18/2020 21:04	Perfluorohexanoic acid (PFHxA)		0.0056		ug/L	0.0020
	<b>202009170179</b>	<b><u>MB-INF-20200917</u></b>				
09/21/2020 20:15	Alkalinity in CaCO3 units		160		mg/L	2.0
09/25/2020 15:57	Arsenic Total ICAP/MS		1.7	10	ug/L	1.0
09/18/2020 14:21	Calcium Total ICAP		61		mg/L	1.0
09/17/2020 18:30	Chloride		51	250	mg/L	2.5
09/21/2020 15:35	Hexavalent chromium(Dissolved)		0.44		ug/L	0.020
09/18/2020 14:21	Magnesium Total ICAP		12		mg/L	0.10
09/17/2020 18:30	Nitrate as Nitrogen by IC		2.6	10	mg/L	0.50
09/17/2020 18:30	Nitrate as NO3 (calc)		12	45	mg/L	2.2
09/18/2020 21:14	Perfluorobutanesulfonic acid (PFBS)		0.0098		ug/L	0.0020
09/18/2020 21:14	Perfluoroheptanoic acid (PFHpA)		0.0044		ug/L	0.0020
09/18/2020 21:14	Perfluorohexanesulfonic acid (PFHxS)		0.0068		ug/L	0.0020
09/18/2020 21:14	Perfluorohexanoic acid (PFHxA)		0.0060		ug/L	0.0020
09/18/2020 21:14	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
09/18/2020 21:14	Perfluorooctanesulfonic acid (PFOS)		0.037		ug/L	0.0020
09/18/2020 21:14	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
09/18/2020 14:21	Potassium Total ICAP		3.9		mg/L	1.0
09/18/2020 14:21	Sodium Total ICAP		51		mg/L	1.0
09/17/2020 18:30	Sulfate		77	250	mg/L	2.5

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
09/23/2020 01:39	Total Dissolved Solids (TDS)		400	500	mg/L	10
09/18/2020 15:31	Total Hardness as CaCO3 by ICP (calc)		200		mg/L	3.0
09/17/2020 18:30	Total Nitrate, Nitrite-N, CALC		2.6		mg/L	0.10
09/25/2020 17:32	Total Organic Carbon		0.95		mg/L	0.20
09/25/2020 17:48	Uranium by ICPMS as pCi/L		1.5		pCi/L	0.70
09/25/2020 15:57	Uranium ICAP/MS		2.2	30	ug/L	1.0
		<b>202009170180</b>	<b><u>MB-INF-DUP-20200917</u></b>			
09/18/2020 21:24	Perfluorobutanesulfonic acid (PFBS)		0.0098		ug/L	0.0020
09/18/2020 21:24	Perfluoroheptanoic acid (PFHpA)		0.0042		ug/L	0.0020
09/18/2020 21:24	Perfluorohexanesulfonic acid (PFHxS)		0.0068		ug/L	0.0020
09/18/2020 21:24	Perfluorohexanoic acid (PFHxA)		0.0061		ug/L	0.0020
09/18/2020 21:24	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
09/18/2020 21:24	Perfluorooctanesulfonic acid (PFOS)		0.037		ug/L	0.0020
09/18/2020 21:24	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20200917 (202009170160)</b>					<b>Sampled on 09/17/2020 0803</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	13C2-PFDA	97	%		1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	13C2-PFHxA	108	%		1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	99	%		1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	90	%		1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	104	%		1

<b>GAC-2-20200917 (202009170161)</b>					<b>Sampled on 09/17/2020 0806</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	13C2-PFDA	100	%		1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	13C2-PFHxA	107	%		1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	99	%		1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	91	%		1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	106	%		1

**GAC-3-20200917 (202009170162)**

**Sampled on 09/17/2020 0809**

**EPA 537.1 - EPA Method 537.1**

09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	13C2-PFDA	99	%		1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	13C2-PFHxA	108	%		1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	97	%		1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	96	%		1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**GAC-4-20200917 (202009170163)**

Sampled on 09/17/2020 0812

**EPA 537.1 - EPA Method 537.1**

09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	13C2-PFDA	101	%		1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	13C2-PFHxA	103	%		1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	97	%		1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	98	%		1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**IX-1-20200917 (202009170164)**

Sampled on 09/17/2020 0815

**EPA 537.1 - EPA Method 537.1**

09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	13C2-PFDA	102	%		1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	13C2-PFHxA	107	%		1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	100	%		1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	100	%		1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**IX-2-20200917 (202009170165)**

**Sampled on 09/17/2020 0818**

**EPA 537.1 - EPA Method 537.1**

09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0035	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	13C2-PFDA	99	%		1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	13C2-PFHxA	106	%		1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	96	%		1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	100	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	101	%		1
<b>IX-3-20200917 (202009170166)</b>					<b>Sampled on 09/17/2020 0821</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	13C2-PFDA	99	%		1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	13C2-PFHxA	106	%		1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	97	%		1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	100	%		1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	100	%		1

<b>IX-4-20200917 (202009170167)</b>					<b>Sampled on 09/17/2020 0824</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	13C2-PFDA	98	%		1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	13C2-PFHxA	105	%		1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	97	%		1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	100	%		1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**LH-INF-20200917 (202009170169)**

Sampled on 09/17/2020 0827

**EPA 200.8 - ICPMS Metals**

10/02/20 20:13	1275497	1278449	(EPA 200.8)	Arsenic Total ICAP/MS	3.2	ug/L	1.0	1
09/30/20 18:14	1275497	1277546	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
09/30/20 18:14	1275497	1277546	(EPA 200.8)	Uranium ICAP/MS	5.2	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

09/18/20 14:03	1275497	1275504	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
09/18/20 14:03	1275497	1275504	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
09/18/20 14:03	1275497	1275504	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
09/18/20 14:03	1275497	1275504	(EPA 200.7)	Potassium Total ICAP	4.6	mg/L	1.0	1
09/18/20 14:03	1275497	1275504	(EPA 200.7)	Sodium Total ICAP	69	mg/L	1.0	1

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Report: 893261  
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 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>SM 5310C - Total Organic Carbon</b>									
	09/25/20 17:16		1277083	(SM 5310C)	Total Organic Carbon	0.85	mg/L	0.20	1
<b>EPA 200.8 - Uranium by ICPMS as pCi/L</b>									
	10/01/20 13:45			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.5 (c)	pCi/L	0.70	1
<b>SM 2340B - Total Hardness as CaCO3 by ICP</b>									
	09/18/20 15:41			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
<b>EPA 218.6 - Hexavalent chromium(Dissolved)</b>									
	09/21/20 13:56		1276064	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.64	ug/L	0.020	1
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>									
	09/17/20 18:43		1275385	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
	09/17/20 18:43		1275385	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
	09/17/20 18:43		1275385	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	09/17/20 18:43		1275385	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	09/17/20 18:43		1275443	(EPA 300.0)	Chloride	110	mg/L	2.5	5
	09/17/20 18:43		1275443	(EPA 300.0)	Sulfate	180	mg/L	2.5	5
<b>EPA 314.0 - Perchlorate</b>									
	09/22/20 15:02	(1)	1275914	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0065	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0027	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1

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Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	13C2-PFDA	97	%		1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	13C2-PFHxA	103	%		1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	93	%		1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	97	%		1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	103	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	09/23/20 06:55			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.97	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,1,1-Trichloroethane	ND (R7)	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Bromochloromethane	ND (LK,LM)	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1

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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Carbon disulfide	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Carbon Tetrachloride	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Chlorobenzene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Chlorodibromomethane	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Chloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Chloroform (Trichloromethane)	ND (LK,R2)	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) cis-1,3-Dichloropropene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Dibromomethane	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Dichlorodifluoromethane	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Dichloromethane	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Di-isopropyl ether	ND	ug/L	3.0	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Ethyl benzene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Hexachlorobutadiene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Isopropylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) m,p-Xylenes	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Naphthalene	ND (LM)	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) n-Butylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) n-Propylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) o-Chlorotoluene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) o-Xylene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) p-Chlorotoluene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) p-Isopropyltoluene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) sec-Butylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Styrene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) tert-amyl Methyl Ether	ND	ug/L	3.0	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) tert-Butylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Toluene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Total 1,3-Dichloropropene	ND	ug/L	0.50	1

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Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,2-Dichloroethane-d4	103	%		1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	4-Bromofluorobenzene	104	%		1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Toluene-d8	100	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	09/21/20 22:32		1276180	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
09/22/20	09/23/20 01:38	1276376	1276382	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	670	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	09/21/20 22:45		1276091	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<b>GAC-5-20200917 (202009170171)</b>					<b>Sampled on 09/17/2020 1003</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0045	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0029	ug/L	0.0020	1

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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	13C2-PFDA	98	%		1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	13C2-PFHxA	102	%		1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	92	%		1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	93	%		1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**GAC-6-20200917 (202009170172)**

**Sampled on 09/17/2020 1006**

**EPA 537.1 - EPA Method 537.1**

09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0023	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	13C2-PFDA	97	%		1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	13C2-PFHxA	103	%		1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1

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Report: 893261  
 Project: 0250000  
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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	95	%		1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	98	%		1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**GAC-7-20200917 (202009170173)**

**Sampled on 09/17/2020 1009**

**EPA 537.1 - EPA Method 537.1**

09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0051	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	13C2-PFDA	99	%		1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	13C2-PFHxA	102	%		1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	94	%		1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	97	%		1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**GAC-8-20200917 (202009170174)**

**Sampled on 09/17/2020 1012**

**EPA 537.1 - EPA Method 537.1**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	13C2-PFDA	98	%		1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	13C2-PFHxA	105	%		1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	97	%		1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	98	%		1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**IX-5-20200917 (202009170175)**

**Sampled on 09/17/2020 1015**

**EPA 537.1 - EPA Method 537.1**

09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0028	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	13C2-PFDA	98	%		1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	13C2-PFHxA	102	%		1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	94	%		1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	97	%		1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**IX-6-20200917 (202009170176)**

**Sampled on 09/17/2020 1018**

**EPA 537.1 - EPA Method 537.1**

09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0052	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	13C2-PFDA	97	%		1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	13C2-PFHxA	103	%		1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	94	%		1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	96	%		1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**IX-7-20200917 (202009170177)**

**Sampled on 09/17/2020 1021**

**EPA 537.1 - EPA Method 537.1**

09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0025	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0057	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	13C2-PFDA	94	%		1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	13C2-PFHxA	106	%		1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	98	%		1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	97	%		1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	101	%		1

**IX-8-20200917 (202009170178)**

Sampled on 09/17/2020 1024

**EPA 537.1 - EPA Method 537.1**

09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0056	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	13C2-PFDA	99	%		1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	13C2-PFHxA	108	%		1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1

Rounding on totals after summation.  
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Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	100	%		1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	99	%		1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**MB-INF-20200917 (202009170179)**

Sampled on 09/17/2020 1027

**EPA 200.8 - ICPMS Metals**

09/18/20	09/25/20 15:57	1275497	1276357	(EPA 200.8)	Arsenic Total ICAP/MS	1.7	ug/L	1.0	1
09/18/20	09/25/20 15:57	1275497	1276357	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
09/18/20	09/25/20 15:57	1275497	1276357	(EPA 200.8)	Uranium ICAP/MS	2.2	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

09/18/20	09/18/20 14:21	1275497	1275505	(EPA 200.7)	Calcium Total ICAP	61	mg/L	1.0	1
09/18/20	09/18/20 14:21	1275497	1275505	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
09/18/20	09/18/20 14:21	1275497	1275505	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	0.10	1
09/18/20	09/18/20 14:21	1275497	1275505	(EPA 200.7)	Potassium Total ICAP	3.9	mg/L	1.0	1
09/18/20	09/18/20 14:21	1275497	1275505	(EPA 200.7)	Sodium Total ICAP	51	mg/L	1.0	1

**SM 5310C - Total Organic Carbon**

09/25/20	17:32		1277083	(SM 5310C)	Total Organic Carbon	0.95	mg/L	0.20	1
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**EPA 200.8 - Uranium by ICPMS as pCi/L**

09/25/20	17:48			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.5 (c)	pCi/L	0.70	1
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**SM 2340B - Total Hardness as CaCO3 by ICP**

09/18/20	15:31			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	200 (c)	mg/L	3.0	1
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**EPA 218.6 - Hexavalent chromium(Dissolved)**

09/21/20	15:35		1276064	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.44	ug/L	0.020	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

09/17/20	18:30		1275385	(EPA 300.0)	Nitrate as Nitrogen by IC	2.6	mg/L	0.50	5
09/17/20	18:30		1275385	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
09/17/20	18:30		1275385	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
09/17/20	18:30		1275385	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.6	mg/L	0.10	1

**EPA 300.0 - Chloride, Sulfate by EPA 300.0**

09/17/20	18:30		1275443	(EPA 300.0)	Chloride	51	mg/L	2.5	5
09/17/20	18:30		1275443	(EPA 300.0)	Sulfate	77	mg/L	2.5	5

**EPA 314.0 - Perchlorate**

09/22/20	15:27	(1)	1275914	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
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**EPA 537.1 - EPA Method 537.1**

09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0098	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0044	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0068	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0060	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.037	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	13C2-PFDA	95	%		1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	13C2-PFHxA	104	%		1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	96	%		1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	98	%		1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	d5-NetFOSAA	98	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	09/23/20 06:55			(EPA 1664)	Oil and Grease by 1664(subbed)	ND (J)	mg/L	0.96	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,1,1-Trichloroethane	ND (R7)	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1

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**Water Replenishment District**  
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 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Bromochloromethane	ND (LK,LM)	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Chloroform (Trichloromethane)	ND (LK,R2)	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Naphthalene	ND (LM)	ug/L	0.50	1

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 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,2-Dichloroethane-d4	96	%		1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	4-Bromofluorobenzene	105	%		1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Toluene-d8	99	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	09/21/20 20:15		1276180	(SM 2320B)	Alkalinity in CaCO3 units	160	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
09/22/20	09/23/20 01:39	1276376	1276382	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	400	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	09/21/20 22:43		1276091	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<b>MB-INF-DUP-20200917 (202009170180)</b>									
<b>EPA 537.1 - EPA Method 537.1</b>									
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1

Sampled on 09/17/2020 1030

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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0098	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0042	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0068	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0061	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.037	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	13C2-PFDA	97	%		1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	13C2-PFHxA	101	%		1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	97	%		1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	98	%		1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	d5-NetFOSAA	99	%		1

**FB - 20200917 - HOLD (202009170181)**

**Sampled on 09/17/2020 1033**

**EPA 537.1 - EPA Method 537.1**

09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	13C2-PFDA	120	%		1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	13C2-PFHxA	122	%		1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	13C3-HFPO-DA	114	%		1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	d3-NMeFOSAA	116	%		1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	d5-NEtFOSAA	116	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



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**Report:** 893261  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District

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**Total Suspended Solids (TSS)**

**Analytical Batch: 1276091**

202009170169 LH-INF-20200917  
 202009170179 MB-INF-20200917

**Analysis Date: 09/21/2020**

Analyzed by: TJ52  
 Analyzed by: TJ52

**Volatile Organics by GCMS**

**Prep Batch: 1276121 Analytical Batch: 1276124**

202009170169 LH-INF-20200917  
 202009170179 MB-INF-20200917

**Analysis Date: 09/22/2020**

Analyzed by: TG9W  
 Analyzed by: TG9W

**Alkalinity in CaCO3 units**

**Analytical Batch: 1276180**

202009170169 LH-INF-20200917  
 202009170179 MB-INF-20200917

**Analysis Date: 09/21/2020**

Analyzed by: ZS6I  
 Analyzed by: ZS6I

**ICPMS Metals**

**Prep Batch: 1275497 Analytical Batch: 1276357**

202009170179 MB-INF-20200917

**Analysis Date: 09/25/2020**

Analyzed by: DHX7

**Total Dissolved Solids (TDS)**

**Prep Batch: 1276376 Analytical Batch: 1276382**

202009170169 LH-INF-20200917  
 202009170179 MB-INF-20200917

**Analysis Date: 09/23/2020**

Analyzed by: TJ52  
 Analyzed by: TJ52

**EPA Method 537.1**

**Prep Batch: 1276326 Analytical Batch: 1276824**

202009170181 FB - 20200917 - HOLD

**Analysis Date: 09/23/2020**

Analyzed by: KAM

**Total Organic Carbon**

**Analytical Batch: 1277083**

202009170169 LH-INF-20200917  
 202009170179 MB-INF-20200917

**Analysis Date: 09/25/2020**

Analyzed by: ZB2Z  
 Analyzed by: ZB2Z

**ICPMS Metals**

**Prep Batch: 1275497 Analytical Batch: 1277546**

202009170169 LH-INF-20200917

**Analysis Date: 09/30/2020**

Analyzed by: AZS

**ICPMS Metals**

**Prep Batch: 1275497 Analytical Batch: 1278449**

202009170169 LH-INF-20200917

**Analysis Date: 10/02/2020**

Analyzed by: DHX7

Tel: (626) 386-1100  
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Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1275385</b>					<b>Analysis Date: 09/17/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.50	mg/L	100	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.50	mg/L	100	(90-110)	20	0.40
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0452	mg/L	90	(50-150)		
MS_202009160695	Nitrate as Nitrogen by IC	ND	6.5	6.66	mg/L	107	(80-120)		
MS_202009180026	Nitrate as Nitrogen by IC	ND	6.5	6.78	mg/L	106	(80-120)		
MSD_202009160695	Nitrate as Nitrogen by IC	ND	6.5	6.67	mg/L	107	(80-120)	20	0.090
MSD_202009180026	Nitrate as Nitrogen by IC	ND	6.5	6.82	mg/L	107	(80-120)	20	0.66
LCS1	Nitrite Nitrogen by IC		1	0.957	mg/L	96	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.954	mg/L	95	(90-110)	20	0.31
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0436	mg/L	87	(50-150)		
MS_202009160695	Nitrite Nitrogen by IC	ND	2.5	1.75	mg/L	<b>70</b>	(80-120)		
MS_202009180026	Nitrite Nitrogen by IC	ND	2.5	1.72	mg/L	<b>69</b>	(80-120)		
MSD_202009160695	Nitrite Nitrogen by IC	ND	2.5	1.75	mg/L	<b>70</b>	(80-120)	20	0.097
MSD_202009180026	Nitrite Nitrogen by IC	ND	2.5	1.73	mg/L	<b>69</b>	(80-120)	20	0.87
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1275443</b>					<b>Analysis Date: 09/17/2020</b>				
LCS1	Chloride		25	26.1	mg/L	105	(90-110)		
LCS2	Chloride		25	26.1	mg/L	104	(90-110)	20	0.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.469	mg/L	94	(50-150)		
MS_202009160695	Chloride	330	130	ND	mg/L	81	(80-120)		
MS_202009180026	Chloride	320	130	ND	mg/L	82	(80-120)		
MSD_202009160695	Chloride	330	130	ND	mg/L	80	(80-120)	20	0.14
MSD_202009180026	Chloride	320	130	ND	mg/L	81	(80-120)	20	0.23
LCS1	Sulfate		50	51.4	mg/L	103	(90-110)		
LCS2	Sulfate		50	51.4	mg/L	103	(90-110)	20	0.0
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.992	mg/L	99	(50-150)		
MRLW	Sulfate		0.25	0.237	mg/L	95	(50-150)		
MS_202009160695	Sulfate	2.4	50	141	mg/L	111	(80-120)		
MS_202009180026	Sulfate	78	125	217	mg/L	111	(80-120)		
MSD_202009160695	Sulfate	2.4	50	141	mg/L	111	(80-120)	20	0.20

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202009180026	Sulfate	78	125	217	mg/L	112	(80-120)	20	0.045

ICP Metals by EPA 200.7

Analytical Batch: 1275504

Analysis Date: 09/18/2020

LCS1	Calcium Total ICAP		50	50.0	mg/L	100	(85-115)		
LCS2	Calcium Total ICAP		50	51.7	mg/L	103	(85-115)	20	3.3
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.968	mg/L	97	(50-150)		
MS_202009170184	Calcium Total ICAP	ND	50	51.0	mg/L	102	(70-130)		
MS2_202009170137	Calcium Total ICAP	2.2	50	51.9	mg/L	99	(70-130)		
MSD_202009170184	Calcium Total ICAP	ND	50	48.4	mg/L	97	(70-130)	20	5.2
MSD2_202009170137	Calcium Total ICAP	2.2	50	51.4	mg/L	99	(70-130)	20	0.94
LCS1	Iron Total ICAP		5	4.97	mg/L	99	(85-115)		
LCS2	Iron Total ICAP		5	5.14	mg/L	103	(85-115)	20	3.4
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0195	mg/L	98	(50-150)		
MS_202009170184	Iron Total ICAP	ND	5	5.08	mg/L	102	(70-130)		
MS2_202009170137	Iron Total ICAP	0.13	5	5.05	mg/L	98	(70-130)		
MSD_202009170184	Iron Total ICAP	ND	5	4.80	mg/L	96	(70-130)	20	5.7
MSD2_202009170137	Iron Total ICAP	0.13	5	5.03	mg/L	98	(70-130)	20	0.46
LCS1	Magnesium Total ICAP		20	19.6	mg/L	98	(85-115)		
LCS2	Magnesium Total ICAP		20	20.3	mg/L	102	(85-115)	20	3.5
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0915	mg/L	92	(50-150)		
MS_202009170184	Magnesium Total ICAP	ND	20	20.3	mg/L	102	(70-130)		
MS2_202009170137	Magnesium Total ICAP	0.80	20	20.5	mg/L	99	(70-130)		
MSD_202009170184	Magnesium Total ICAP	ND	20	19.2	mg/L	96	(70-130)	20	5.3
MSD2_202009170137	Magnesium Total ICAP	0.80	20	20.5	mg/L	98	(70-130)	20	0.18
LCS1	Potassium Total ICAP		20	19.6	mg/L	98	(85-115)		
LCS2	Potassium Total ICAP		20	20.4	mg/L	102	(85-115)	20	4.0
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.707	mg/L	71	(50-150)		
MS_202009170184	Potassium Total ICAP	ND	20	20.5	mg/L	102	(70-130)		
MS2_202009170137	Potassium Total ICAP	ND	20	20.3	mg/L	101	(70-130)		
MSD_202009170184	Potassium Total ICAP	ND	20	19.5	mg/L	98	(70-130)	20	5.0
MSD2_202009170137	Potassium Total ICAP	ND	20	20.3	mg/L	101	(70-130)	20	0.16
LCS1	Sodium Total ICAP		50	49.0	mg/L	98	(85-115)		
LCS2	Sodium Total ICAP		50	51.0	mg/L	102	(85-115)	20	4.0

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.834	mg/L	83	(50-150)		
MS_202009170184	Sodium Total ICAP	ND	50	50.6	mg/L	101	(70-130)		
MS2_202009170137	Sodium Total ICAP	3.4	50	51.9	mg/L	97	(70-130)		
MSD_202009170184	Sodium Total ICAP	ND	50	47.9	mg/L	96	(70-130)	20	5.4
MSD2_202009170137	Sodium Total ICAP	3.4	50	51.8	mg/L	97	(70-130)	20	0.028

ICP Metals by EPA 200.7

Analytical Batch: 1275505

Analysis Date: 09/18/2020

LCS1	Calcium Total ICAP		50	50.6	mg/L	101	(85-115)		
LCS2	Calcium Total ICAP		50	50.5	mg/L	101	(85-115)	20	0.20
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.987	mg/L	99	(50-150)		
MS_202009170458	Calcium Total ICAP	15	50	63.2	mg/L	96	(70-130)		
MS2_202009170547	Calcium Total ICAP	40	50	87.5	mg/L	95	(70-130)		
MSD_202009170458	Calcium Total ICAP	15	50	63.1	mg/L	96	(70-130)	20	0.20
MSD2_202009170547	Calcium Total ICAP	40	50	88.1	mg/L	96	(70-130)	20	0.64
LCS1	Iron Total ICAP		5	5.05	mg/L	101	(85-115)		
LCS2	Iron Total ICAP		5	5.05	mg/L	101	(85-115)	20	0.0
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0201	mg/L	100	(50-150)		
MS_202009170458	Iron Total ICAP	ND	5	4.88	mg/L	98	(70-130)		
MS2_202009170547	Iron Total ICAP	ND	5	4.96	mg/L	99	(70-130)		
MSD_202009170458	Iron Total ICAP	ND	5	4.88	mg/L	98	(70-130)	20	0.28
MSD2_202009170547	Iron Total ICAP	ND	5	5.04	mg/L	101	(70-130)	20	1.7
LCS1	Magnesium Total ICAP		20	20.0	mg/L	100	(85-115)		
LCS2	Magnesium Total ICAP		20	20.0	mg/L	100	(85-115)	20	0.0
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0940	mg/L	94	(50-150)		
MS_202009170458	Magnesium Total ICAP	0.45	20	19.9	mg/L	97	(70-130)		
MS2_202009170547	Magnesium Total ICAP	15	20	34.7	mg/L	97	(70-130)		
MSD_202009170458	Magnesium Total ICAP	0.45	20	20.0	mg/L	98	(70-130)	20	0.37
MSD2_202009170547	Magnesium Total ICAP	15	20	35.0	mg/L	99	(70-130)	20	0.87
LCS1	Potassium Total ICAP		20	20.1	mg/L	100	(85-115)		
LCS2	Potassium Total ICAP		20	20.2	mg/L	101	(85-115)	20	0.50
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.708	mg/L	71	(50-150)		
MS_202009170458	Potassium Total ICAP	2.5	20	22.9	mg/L	102	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

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 1 800 566 LABS (1 800 566 5227)

Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202009170547	Potassium Total ICAP	7.8	20	28.7	mg/L	104	(70-130)		
MSD_202009170458	Potassium Total ICAP	2.5	20	23.1	mg/L	103	(70-130)	20	0.67
MSD2_202009170547	Potassium Total ICAP	7.8	20	29.1	mg/L	106	(70-130)	20	1.5
LCS1	Sodium Total ICAP		50	50.0	mg/L	100	(85-115)		
LCS2	Sodium Total ICAP		50	50.0	mg/L	100	(85-115)	20	0.0
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.905	mg/L	91	(50-150)		
MS_202009170458	Sodium Total ICAP	39	50	84.3	mg/L	90	(70-130)		
MS2_202009170547	Sodium Total ICAP	70	50	113	mg/L	86	(70-130)		
MSD_202009170458	Sodium Total ICAP	39	50	84.6	mg/L	91	(70-130)	20	0.35
MSD2_202009170547	Sodium Total ICAP	70	50	114	mg/L	88	(70-130)	20	0.54

Perchlorate by EPA 314.0

Analytical Batch: 1275914

Analysis Date: 09/22/2020

LCS1	Perchlorate		25	28.1	ug/L	112	(85-115)		
LCS2	Perchlorate		25	27.9	ug/L	112	(85-115)	15	0.71
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	4.87	ug/L	122	(75-125)		
MS_202009170651	Perchlorate	ND	25	22.9	ug/L	92	(80-120)		
MSD_202009170651	Perchlorate	ND	25	23.6	ug/L	94	(80-120)	15	3.0

EPA Method 537.1 by EPA 537.1

Prep Batch: 1275482 Analytical Batch: 1275979

Analysis Date: 09/18/2020

DUP_202009170161	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0266	ug/L	113	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0267	ug/L	114	(70-130)	30	0.38
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00207	ug/L	110	(50-150)		
MS2_202009170160	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0505	ug/L	107	(70-130)		
DUP_202009170161	13C2-PFDA (S)			95.7	%	96	(70-130)		
LCS1	13C2-PFDA (S)		100	95.7	%	96	(70-130)		
LCS2	13C2-PFDA (S)		100	97.0	%	97	(70-130)		
MBLK	13C2-PFDA (S)			92.6	%	93	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	92.7	%	93	(70-130)		
MS2_202009170160	13C2-PFDA (S)		100	96.2	%	96	(70-130)		
DUP_202009170161	13C2-PFHxA (S)			102	%	102	(70-130)		
LCS1	13C2-PFHxA (S)		100	104	%	104	(70-130)		
LCS2	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFHxA (S)			106	%	106	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 893261  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MS2_202009170160	13C2-PFHxA (S)		100	106	%	106	(70-130)		
DUP_202009170161	13C2-PFOA- IS#1 (I)			104	%	104	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	99.0	%	99	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	98.1	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MS2_202009170160	13C2-PFOA- IS#1 (I)		100	98.8	%	99	(50-150)		
DUP_202009170161	13C3-HFPO-DA (S)			94.9	%	95	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	95.3	%	95	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	99.4	%	99	(70-130)		
MBLK	13C3-HFPO-DA (S)			96.2	%	96	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	92.6	%	93	(70-130)		
MS2_202009170160	13C3-HFPO-DA (S)		100	98.8	%	99	(70-130)		
DUP_202009170161	13C4-PFOS- IS#2 (I)			97.3	%	97	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	95.0	%	95	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	98.6	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			95.0	%	95	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	95.9	%	96	(50-150)		
MS2_202009170160	13C4-PFOS- IS#2 (I)		100	96.7	%	97	(50-150)		
DUP_202009170161	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0261	ug/L	111	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0273	ug/L	116	(70-130)	30	4.5
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00204	ug/L	108	(50-150)		
MS2_202009170160	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0507	ug/L	105	(70-130)		
DUP_202009170161	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0256	ug/L	110	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0253	ug/L	109	(70-130)	30	1.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00207	ug/L	111	(50-150)		
MS2_202009170160	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0495	ug/L	106	(70-130)		
DUP_202009170161	d3-NMeFOSAA (I)			93.9	%	94	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	87.5	%	88	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	89.4	%	89	(50-150)		
MBLK	d3-NMeFOSAA (I)			86.2	%	86	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	87.7	%	88	(50-150)		
MS2_202009170160	d3-NMeFOSAA (I)		100	89.7	%	90	(50-150)		

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Report: 893261  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202009170161	d5-NEtFOSAA (S)			101	%	101	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	100	%	100	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	97.0	%	97	(70-130)		
MBLK	d5-NEtFOSAA (S)			95.9	%	96	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	99.8	%	100	(70-130)		
MS2_202009170160	d5-NEtFOSAA (S)		100	97.4	%	97	(70-130)		
DUP_202009170161	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0276	ug/L	111	(70-130)	30	6.3
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00200	ug/L	100	(50-150)		
MS2_202009170160	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0519	ug/L	104	(70-130)		
DUP_202009170161	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0275	ug/L	110	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0275	ug/L	110	(70-130)	30	0.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00213	ug/L	107	(50-150)		
MS2_202009170160	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0523	ug/L	105	(70-130)		
DUP_202009170161	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0264	ug/L	106	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0272	ug/L	109	(70-130)	30	3.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00221	ug/L	111	(50-150)		
MS2_202009170160	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0523	ug/L	105	(70-130)		
DUP_202009170161	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0256	ug/L	116	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0251	ug/L	114	(70-130)	30	2.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00198	ug/L	112	(50-150)		
MS2_202009170160	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0476	ug/L	107	(70-130)		
DUP_202009170161	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0263	ug/L	105	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0270	ug/L	108	(70-130)	30	2.6
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00209	ug/L	105	(50-150)		
MS2_202009170160	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0508	ug/L	101	(70-130)		
DUP_202009170161	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0249	ug/L	100	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0265	ug/L	106	(70-130)	30	6.2
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00196	ug/L	98	(50-150)		
MS2_202009170160	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0484	ug/L	97	(70-130)		
DUP_202009170161	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0296	ug/L	119	(70-130)	30	4.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00234	ug/L	117	(50-150)		
MS2_202009170160	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0556	ug/L	111	(70-130)		
DUP_202009170161	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0262	ug/L	115	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0255	ug/L	112	(70-130)	30	2.7
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00199	ug/L	109	(50-150)		
MS2_202009170160	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0494	ug/L	108	(70-130)		
DUP_202009170161	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0274	ug/L	109	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0290	ug/L	116	(70-130)	30	6.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00220	ug/L	110	(50-150)		
MS2_202009170160	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0545	ug/L	109	(70-130)		
DUP_202009170161	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0270	ug/L	108	(70-130)	30	1.5
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00209	ug/L	105	(50-150)		
MS2_202009170160	Perfluorononanoic acid (PFNA)	ND	0.05	0.0518	ug/L	104	(70-130)		
DUP_202009170161	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0259	ug/L	112	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0253	ug/L	109	(70-130)	30	2.3
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00209	ug/L	113	(50-150)		
MS2_202009170160	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0483	ug/L	104	(70-130)		
DUP_202009170161	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0277	ug/L	111	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0283	ug/L	113	(70-130)	30	2.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 893261  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00223	ug/L	112	(50-150)		
MS2_202009170160	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0529	ug/L	106	(70-130)		
DUP_202009170161	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0279	ug/L	112	(70-130)	30	4.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00238	ug/L	119	(50-150)		
MS2_202009170160	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0528	ug/L	105	(70-130)		
DUP_202009170161	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0268	ug/L	107	(70-130)	30	5.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00202	ug/L	101	(50-150)		
MS2_202009170160	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0509	ug/L	102	(70-130)		
DUP_202009170161	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0258	ug/L	103	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0270	ug/L	108	(70-130)	30	4.9
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00198	ug/L	99	(50-150)		
MS2_202009170160	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0496	ug/L	99	(70-130)		

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1276064

Analysis Date: 09/21/2020

LCS1	Hexavalent chromium(Dissolved)		2	1.98	ug/L	99	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.99	ug/L	100	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0182	ug/L	91	(50-150)		
MS_202009150913	Hexavalent chromium(Dissolved)	5.8	2	7.85	ug/L	103	(90-110)		
MS_202009170572	Hexavalent chromium(Dissolved)	0.24	2	2.32	ug/L	104	(90-110)		
MSD_202009150913	Hexavalent chromium(Dissolved)	5.8	2	7.84	ug/L	103	(90-110)	20	0.14
MSD_202009170572	Hexavalent chromium(Dissolved)	0.24	2	2.32	ug/L	104	(90-110)	20	0.25

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1276091

Analysis Date: 09/21/2020

DUP_202008120043	Total Suspended Solids (TSS)	240		222	mg/L		(0-10)	10	8.6
DUP_202008120073	Total Suspended Solids (TSS)	110		100	mg/L		(0-10)	10	9.5
LCS1	Total Suspended Solids (TSS)		175	170	mg/L	97	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	180	mg/L	103	(71-107)	20	5.7
MBLK	Total Suspended Solids (TSS)			<10	mg/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Total Suspended Solids (TSS)		10	11.0	mg/L	110	(50-150)		
<b>Volatile Organics by GCMS by EPA 524.2</b>									
<b>Analytical Batch: 1276124</b>					<b>Analysis Date: 09/21/2020</b>				
LCS1	1,1,1,2-Tetrachloroethane		5	5.08	ug/L	102	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	5.08	ug/L	102	(70-130)	20	0.0
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.660	ug/L	132	(50-150)		
LCS1	1,1,1-Trichloroethane		5	6.26	ug/L	125	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.91	ug/L	98	(70-130)	20	<b>24</b>
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.30	ug/L	106	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	5.09	ug/L	102	(70-130)	20	4.0
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.63	ug/L	93	(70-130)		
LCS2	1,1,2-Trichloroethane		5	4.87	ug/L	97	(70-130)	20	5.0
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	1,1-Dichloroethane		5	4.87	ug/L	97	(70-130)		
LCS2	1,1-Dichloroethane		5	4.84	ug/L	97	(70-130)	20	0.62
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,1-Dichloroethylene		5	4.86	ug/L	97	(70-130)		
LCS2	1,1-Dichloroethylene		5	4.89	ug/L	98	(70-130)	20	0.62
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,1-Dichloropropene		5	4.78	ug/L	96	(70-130)		
LCS2	1,1-Dichloropropene		5	4.45	ug/L	89	(70-130)	20	7.2
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.79	ug/L	96	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	4.76	ug/L	95	(70-130)	20	0.63
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.650	ug/L	130	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.01	ug/L	100	(70-130)		
LCS2	1,2,3-Trichloropropane		5	4.84	ug/L	97	(70-130)	20	3.5

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Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.87	ug/L	97	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	4.88	ug/L	98	(70-130)	20	0.21
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.580	ug/L	116	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.79	ug/L	96	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	4.66	ug/L	93	(70-130)	20	2.8
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.450	ug/L	90	(50-150)		
LCS1	1,2-Dichloroethane		5	4.63	ug/L	93	(70-130)		
LCS2	1,2-Dichloroethane		5	4.88	ug/L	98	(70-130)	20	5.3
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	94.8	%	95	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	94.4	%	94	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			102	%	102	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	103	%	103	(70-130)		
MRLLLW	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
LCS1	1,2-Dichloropropane		5	4.83	ug/L	97	(70-130)		
LCS2	1,2-Dichloropropane		5	4.95	ug/L	99	(70-130)	20	2.5
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.450	ug/L	90	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.65	ug/L	93	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.57	ug/L	91	(70-130)	20	1.7
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,3-Dichloropropane		5	4.74	ug/L	95	(70-130)		
LCS2	1,3-Dichloropropane		5	4.95	ug/L	99	(70-130)	20	4.3
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.480	ug/L	96	(50-150)		
LCS1	2,2-Dichloropropane		5	4.54	ug/L	91	(70-130)		
LCS2	2,2-Dichloropropane		5	4.49	ug/L	90	(70-130)	20	1.1
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.450	ug/L	90	(50-150)		
LCS1	2-Butanone (MEK)		50	43.2	ug/L	86	(70-130)		
LCS2	2-Butanone (MEK)		50	44.6	ug/L	89	(70-130)	20	3.2
MBLK	2-Butanone (MEK)			<5.0	ug/L				

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Report: 893261  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	2-Butanone (MEK)		5	4.96	ug/L	99	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	102	%	102	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	98.4	%	98	(70-130)		
MBLK	4-Bromofluorobenzene (S)			104	%	104	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	103	%	103	(70-130)		
MRLW	4-Bromofluorobenzene (S)		5	104	%	104	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	46.0	ug/L	92	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	45.7	ug/L	91	(70-130)	20	0.65
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.81	ug/L	96	(50-150)		
LCS1	Benzene		5	4.90	ug/L	98	(70-130)		
LCS2	Benzene		5	4.89	ug/L	98	(70-130)	20	0.20
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Bromobenzene		5	4.90	ug/L	98	(70-130)		
LCS2	Bromobenzene		5	5.00	ug/L	100	(70-130)	20	2.0
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.450	ug/L	90	(50-150)		
LCS1	Bromochloromethane		5	7.29	ug/L	<b>146</b>	(70-130)		
LCS2	Bromochloromethane		5	7.31	ug/L	<b>146</b>	(70-130)	20	0.27
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.890	ug/L	<b>178</b>	(50-150)		
LCS1	Bromodichloromethane		5	4.83	ug/L	97	(70-130)		
LCS2	Bromodichloromethane		5	4.87	ug/L	97	(70-130)	20	0.83
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	Bromoethane		5	5.00	ug/L	100	(70-130)		
LCS2	Bromoethane		5	5.02	ug/L	100	(70-130)	20	0.40
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Bromoform		5	4.67	ug/L	93	(70-130)		
LCS2	Bromoform		5	4.87	ug/L	97	(70-130)	20	4.2
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.490	ug/L	98	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	4.67	ug/L	93	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	4.79	ug/L	96	(70-130)	20	2.5
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.670	ug/L	134	(50-150)		

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Report: 893261  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Carbon disulfide		5	5.27	ug/L	105	(70-130)		
LCS2	Carbon disulfide		5	5.18	ug/L	104	(70-130)	20	1.7
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.470	ug/L	94	(50-150)		
LCS1	Carbon Tetrachloride		5	5.09	ug/L	102	(70-130)		
LCS2	Carbon Tetrachloride		5	4.94	ug/L	99	(70-130)	20	3.0
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.430	ug/L	86	(50-150)		
LCS1	Chlorobenzene		5	4.72	ug/L	94	(70-130)		
LCS2	Chlorobenzene		5	4.81	ug/L	96	(70-130)	20	1.9
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Chlorodibromomethane		5	4.75	ug/L	95	(70-130)		
LCS2	Chlorodibromomethane		5	4.84	ug/L	97	(70-130)	20	1.9
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.620	ug/L	124	(50-150)		
LCS1	Chloroethane		5	4.85	ug/L	97	(70-130)		
LCS2	Chloroethane		5	5.09	ug/L	102	(70-130)	20	4.8
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	6.77	ug/L	<b>135</b>	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	5.15	ug/L	103	(70-130)	20	<b>27</b>
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.510	ug/L	102	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	5.07	ug/L	101	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.98	ug/L	100	(70-130)	20	1.8
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.660	ug/L	132	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.63	ug/L	93	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.78	ug/L	96	(70-130)	20	3.2
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.510	ug/L	102	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.64	ug/L	93	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.61	ug/L	92	(70-130)	20	0.65
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.670	ug/L	134	(50-150)		
LCS1	Dibromomethane		5	4.57	ug/L	91	(70-130)		
LCS2	Dibromomethane		5	4.61	ug/L	92	(70-130)	20	0.87

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	Dichlorodifluoromethane		5	4.31	ug/L	86	(70-130)		
LCS2	Dichlorodifluoromethane		5	4.48	ug/L	90	(70-130)	20	3.9
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	Dichloromethane		5	4.22	ug/L	84	(70-130)		
LCS2	Dichloromethane		5	4.40	ug/L	88	(70-130)	20	4.2
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.630	ug/L	126	(50-150)		
LCS1	Di-isopropyl ether		5	5.07	ug/L	101	(70-130)		
LCS2	Di-isopropyl ether		5	5.00	ug/L	100	(70-130)	20	1.4
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.530	ug/L	106	(50-150)		
LCS1	Ethyl benzene		5	4.85	ug/L	97	(70-130)		
LCS2	Ethyl benzene		5	4.96	ug/L	99	(70-130)	20	2.2
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Hexachlorobutadiene		5	4.88	ug/L	98	(70-130)		
LCS2	Hexachlorobutadiene		5	4.87	ug/L	97	(70-130)	20	0.21
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.590	ug/L	118	(50-150)		
LCS1	Isopropylbenzene		5	5.22	ug/L	104	(70-130)		
LCS2	Isopropylbenzene		5	5.06	ug/L	101	(70-130)	20	3.1
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	m,p-Xylenes		10	9.11	ug/L	91	(70-130)		
LCS2	m,p-Xylenes		10	9.52	ug/L	95	(70-130)	20	4.4
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.880	ug/L	88	(50-150)		
MRLLW	m,p-Xylenes		0.5	0.470	ug/L	94	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.72	ug/L	94	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	4.67	ug/L	93	(70-130)	20	1.1
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	4.80	ug/L	96	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	4.84	ug/L	97	(70-130)	20	0.83
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
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Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Naphthalene		5	5.24	ug/L	105	(70-130)		
LCS2	Naphthalene		5	5.04	ug/L	101	(70-130)	20	3.9
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	1.12	ug/L	<u>224</u>	(50-150)		
LCS1	n-Butylbenzene		5	4.67	ug/L	93	(70-130)		
LCS2	n-Butylbenzene		5	4.54	ug/L	91	(70-130)	20	2.8
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	n-Propylbenzene		5	4.97	ug/L	99	(70-130)		
LCS2	n-Propylbenzene		5	4.91	ug/L	98	(70-130)	20	1.2
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	o-Chlorotoluene		5	4.84	ug/L	97	(70-130)		
LCS2	o-Chlorotoluene		5	4.77	ug/L	95	(70-130)	20	1.5
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.510	ug/L	102	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.75	ug/L	95	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	4.73	ug/L	95	(70-130)	20	0.42
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.510	ug/L	102	(50-150)		
LCS1	o-Xylene		5	4.59	ug/L	92	(70-130)		
LCS2	o-Xylene		5	4.82	ug/L	96	(70-130)	20	4.9
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.450	ug/L	90	(50-150)		
LCS1	p-Chlorotoluene		5	4.72	ug/L	94	(70-130)		
LCS2	p-Chlorotoluene		5	4.65	ug/L	93	(70-130)	20	1.5
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.450	ug/L	90	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	4.68	ug/L	94	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	4.64	ug/L	93	(70-130)	20	0.86
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.480	ug/L	96	(50-150)		
LCS1	p-Isopropyltoluene		5	4.99	ug/L	100	(70-130)		
LCS2	p-Isopropyltoluene		5	4.79	ug/L	96	(70-130)	20	4.1
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.470	ug/L	94	(50-150)		
LCS1	sec-Butylbenzene		5	5.45	ug/L	109	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	sec-Butylbenzene		5	5.36	ug/L	107	(70-130)	20	1.7
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Styrene		5	4.85	ug/L	97	(70-130)		
LCS2	Styrene		5	4.91	ug/L	98	(70-130)	20	1.2
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.420	ug/L	84	(50-150)		
LCS1	tert-amyl Methyl Ether		5	4.76	ug/L	95	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.72	ug/L	94	(70-130)	20	0.84
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.460	ug/L	92	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	5.00	ug/L	100	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	4.98	ug/L	100	(70-130)	20	0.40
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.530	ug/L	106	(50-150)		
LCS1	tert-Butylbenzene		5	4.82	ug/L	96	(70-130)		
LCS2	tert-Butylbenzene		5	5.10	ug/L	102	(70-130)	20	5.7
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.69	ug/L	94	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.81	ug/L	96	(70-130)	20	2.5
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.480	ug/L	96	(50-150)		
LCS1	Toluene		5	4.66	ug/L	93	(70-130)		
LCS2	Toluene		5	4.87	ug/L	97	(70-130)	20	4.4
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Toluene-d8 (S)		5	97.8	%	98	(70-130)		
LCS2	Toluene-d8 (S)		5	99.2	%	99	(70-130)		
MBLK	Toluene-d8 (S)			101	%	101	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	96.8	%	97	(70-130)		
MRLLLW	Toluene-d8 (S)		5	98.6	%	99	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.82	ug/L	96	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	4.76	ug/L	95	(70-130)	20	1.3
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.510	ug/L	102	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.50	ug/L	90	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.59	ug/L	92	(70-130)	20	2.0

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Report: 893261  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.620	ug/L	124	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.87	ug/L	97	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.98	ug/L	100	(70-130)	20	2.2
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.500	ug/L	100	(50-150)		
LCS1	Trichlorofluoromethane		5	4.85	ug/L	97	(70-130)		
LCS2	Trichlorofluoromethane		5	4.95	ug/L	99	(70-130)	20	2.0
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.330	ug/L	66	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	4.44	ug/L	89	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	4.74	ug/L	95	(70-130)	20	6.5
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.480	ug/L	96	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.95	ug/L	99	(70-130)		
LCS2	Vinyl chloride (VC)		5	5.01	ug/L	100	(70-130)	20	1.2
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.490	ug/L	98	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.250	ug/L	100	(50-150)		

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1276180

Analysis Date: 09/21/2020

LCS1	Alkalinity in CaCO3 units		100	100	mg/L	101	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	100	mg/L	100	(90-110)	20	1
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.81	mg/L	91	(50-150)		
MS_202008310443	Alkalinity in CaCO3 units	5.4	100	109	mg/L	103	(80-120)		
MS_202009170066	Alkalinity in CaCO3 units	26	100	128	mg/L	103	(80-120)		
MSD_202008310443	Alkalinity in CaCO3 units	5.4	100	110	mg/L	105	(80-120)	20	1.2
MSD_202009170066	Alkalinity in CaCO3 units	26	100	128	mg/L	102	(80-120)	20	0.23

ICPMS Metals by EPA 200.8

Analytical Batch: 1276357

Analysis Date: 09/25/2020

LCS1	Arsenic Total ICAP/MS		50	52.3	ug/L	105	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	52.3	ug/L	105	(85-115)	20	0.0
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.10	ug/L	110	(50-150)		
MS_202009170179	Arsenic Total ICAP/MS	1.7	50	59.8	ug/L	116	(70-130)		
MS2_202009180213	Arsenic Total ICAP/MS	2	50	57.5	ug/L	111	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202009170179	Arsenic Total ICAP/MS	1.7	50	55.2	ug/L	107	(70-130)	20	7.9
MSD2_202009180213	Arsenic Total ICAP/MS	2	50	56.2	ug/L	108	(70-130)	20	2.3
LCS1	Manganese Total ICAP/MS		100	106	ug/L	106	(85-115)		
LCS2	Manganese Total ICAP/MS		100	103	ug/L	103	(85-115)	20	2.9
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.12	ug/L	106	(50-150)		
MS_202009170179	Manganese Total ICAP/MS	ND	100	107	ug/L	106	(70-130)		
MS2_202009180213	Manganese Total ICAP/MS	ND	100	106	ug/L	104	(70-130)		
MSD_202009170179	Manganese Total ICAP/MS	ND	100	101	ug/L	99	(70-130)	20	6.0
MSD2_202009180213	Manganese Total ICAP/MS	ND	100	102	ug/L	101	(70-130)	20	2.7
LCS1	Uranium ICAP/MS		50	53.5	ug/L	107	(85-115)		
LCS2	Uranium ICAP/MS		50	53.1	ug/L	106	(85-115)	20	0.75
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	1.05	ug/L	105	(50-150)		
MS_202009170179	Uranium ICAP/MS	2.2	50	60.2	ug/L	116	(70-130)		
MS2_202009180213	Uranium ICAP/MS	ND	50	56.7	ug/L	113	(70-130)		
MSD_202009170179	Uranium ICAP/MS	2.2	50	58.0	ug/L	112	(70-130)	20	3.5
MSD2_202009180213	Uranium ICAP/MS	ND	50	54.8	ug/L	110	(70-130)	20	3.2

Total Dissolved Solids (TDS) by E160.1/SM2540C

Analytical Batch: 1276382

Analysis Date: 09/23/2020

DUP_202007140458	Total Dissolved Solid (TDS)	200		202	mg/L		(0-10)	10	1
DUP_202009170571	Total Dissolved Solid (TDS)	370		358	mg/L		(0-10)	10	2.8
LCS1	Total Dissolved Solid (TDS)		175	154	mg/L	88	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	600	mg/L	86	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	7.00	mg/L	70	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1276326 Analytical Batch: 1276824

Analysis Date: 09/23/2020

DUP_202009220120	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0275	ug/L	117	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0258	ug/L	109	(70-130)	30	6.4
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00216	ug/L	115	(50-150)		
MS1_202009220115	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0248	ug/L	105	(70-130)		
DUP_202009220120	13C2-PFDA (S)			116	%	116	(70-130)		
LCS1	13C2-PFDA (S)		100	118	%	119	(70-130)		
LCS2	13C2-PFDA (S)		100	120	%	120	(70-130)		

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RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 893261  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFDA (S)			116	%	116	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	115	%	115	(70-130)		
MS1_202009220115	13C2-PFDA (S)		100	115	%	115	(70-130)		
DUP_202009220120	13C2-PFHxA (S)			118	%	119	(70-130)		
LCS1	13C2-PFHxA (S)		100	122	%	122	(70-130)		
LCS2	13C2-PFHxA (S)		100	123	%	123	(70-130)		
MBLK	13C2-PFHxA (S)			121	%	121	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	122	%	122	(70-130)		
MS1_202009220115	13C2-PFHxA (S)		100	118	%	118	(70-130)		
DUP_202009220120	13C2-PFOA- IS#1 (I)			111	%	111	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			107	%	107	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MS1_202009220115	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
DUP_202009220120	13C3-HFPO-DA (S)			108	%	108	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	115	%	115	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	116	%	116	(70-130)		
MBLK	13C3-HFPO-DA (S)			114	%	114	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	117	%	117	(70-130)		
MS1_202009220115	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
DUP_202009220120	13C4-PFOS- IS#2 (I)			105	%	105	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MS1_202009220115	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
DUP_202009220120	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0285	ug/L	120	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0280	ug/L	118	(70-130)	30	1.8
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00232	ug/L	123	(50-150)		
MS1_202009220115	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0256	ug/L	108	(70-130)		
DUP_202009220120	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0274	ug/L	118	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0259	ug/L	111	(70-130)	30	5.6
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00220	ug/L	118	(50-150)		

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Report: 893261  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202009220115	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0245	ug/L	105	(70-130)		
DUP_202009220120	d3-NMeFOSAA (I)			118	%	118	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	113	%	113	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
MBLK	d3-NMeFOSAA (I)			110	%	110	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
MS1_202009220115	d3-NMeFOSAA (I)		100	116	%	116	(50-150)		
DUP_202009220120	d5-NEtFOSAA (S)			111	%	111	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	115	%	115	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	115	%	115	(70-130)		
MBLK	d5-NEtFOSAA (S)			114	%	114	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
MS1_202009220115	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
DUP_202009220120	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0287	ug/L	115	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0276	ug/L	110	(70-130)	30	3.9
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00230	ug/L	115	(50-150)		
MS1_202009220115	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0250	ug/L	100	(70-130)		
DUP_202009220120	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0284	ug/L	114	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0278	ug/L	111	(70-130)	30	2.1
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00240	ug/L	120	(50-150)		
MS1_202009220115	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0277	ug/L	111	(70-130)		
DUP_202009220120	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0280	ug/L	112	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0273	ug/L	109	(70-130)	30	2.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00236	ug/L	118	(50-150)		
MS1_202009220115	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0274	ug/L	110	(70-130)		
DUP_202009220120	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0265	ug/L	120	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0254	ug/L	115	(70-130)	30	4.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00216	ug/L	122	(50-150)		
MS1_202009220115	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0248	ug/L	112	(70-130)		
DUP_202009220120	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 893261  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0297	ug/L	119	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0286	ug/L	114	(70-130)	30	3.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00234	ug/L	117	(50-150)		
MS1_202009220115	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0287	ug/L	114	(70-130)		
DUP_202009220120	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0284	ug/L	114	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0276	ug/L	110	(70-130)	30	2.9
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00229	ug/L	115	(50-150)		
MS1_202009220115	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0262	ug/L	104	(70-130)		
DUP_202009220120	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0310	ug/L	124	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0301	ug/L	120	(70-130)	30	3.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00250	ug/L	125	(50-150)		
MS1_202009220115	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0290	ug/L	115	(70-130)		
DUP_202009220120	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0273	ug/L	120	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0272	ug/L	119	(70-130)	30	0.37
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00225	ug/L	124	(50-150)		
MS1_202009220115	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0255	ug/L	112	(70-130)		
DUP_202009220120	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0302	ug/L	121	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0293	ug/L	117	(70-130)	30	3.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00245	ug/L	123	(50-150)		
MS1_202009220115	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0271	ug/L	107	(70-130)		
DUP_202009220120	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0300	ug/L	120	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0290	ug/L	116	(70-130)	30	3.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00237	ug/L	119	(50-150)		
MS1_202009220115	Perfluorononanoic acid (PFNA)	ND	0.025	0.0284	ug/L	112	(70-130)		
DUP_202009220120	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0271	ug/L	117	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0255	ug/L	110	(70-130)	30	6.1

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00226	ug/L	122	(50-150)		
MS1_202009220115	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0260	ug/L	111	(70-130)		
DUP_202009220120	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0295	ug/L	118	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0296	ug/L	118	(70-130)	30	0.34
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00260	ug/L	130	(50-150)		
MS1_202009220115	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0280	ug/L	111	(70-130)		
DUP_202009220120	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0300	ug/L	120	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0292	ug/L	117	(70-130)	30	2.7
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00252	ug/L	126	(50-150)		
MS1_202009220115	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0251	ug/L	99	(70-130)		
DUP_202009220120	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0289	ug/L	116	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0277	ug/L	111	(70-130)	30	4.2
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00233	ug/L	117	(50-150)		
MS1_202009220115	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0260	ug/L	103	(70-130)		
DUP_202009220120	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0291	ug/L	117	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0276	ug/L	111	(70-130)	30	5.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00231	ug/L	116	(50-150)		
MS1_202009220115	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0268	ug/L	106	(70-130)		

**Total Organic Carbon by SM 5310C**

Analytical Batch: 1277083

Analysis Date: 09/25/2020

LCS1	Total Organic Carbon		5	5.23	mg/L	105	(90-110)		
LCS2	Total Organic Carbon		5	5.25	mg/L	105	(90-110)	20	0.38
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.249	mg/L	124	(50-150)		
MS_202009170565	Total Organic Carbon	0.45	4	5.01	mg/L	114	(80-120)		
MS2_202009170582	Total Organic Carbon	0.26	2	2.57	mg/L	115	(80-120)		
MSD_202009170565	Total Organic Carbon	0.45	4	5.06	mg/L	115	(80-120)	20	1.0
MSD2_202009170582	Total Organic Carbon	0.26	2	2.53	mg/L	113	(80-120)	20	1.4

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>ICPMS Metals by EPA 200.8</b>									
<b>Analytical Batch: 1277546</b>					<b>Analysis Date: 09/30/2020</b>				
LCS1	Arsenic Total ICAP/MS		50	51.5	ug/L	103	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	52.4	ug/L	105	(85-115)	20	1.7
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.707	ug/L	71	(50-150)		
MS_202009170644	Arsenic Total ICAP/MS	ND	50	55.2	ug/L	110	(70-130)		
MS2_202009210107	Arsenic Total ICAP/MS	ND	50	51.7	ug/L	103	(70-130)		
MSD_202009170644	Arsenic Total ICAP/MS	ND	50	51.3	ug/L	102	(70-130)	20	7.4
MSD2_202009210107	Arsenic Total ICAP/MS	ND	50	50.7	ug/L	101	(70-130)	20	2.0
LCS1	Manganese Total ICAP/MS		100	103	ug/L	103	(85-115)		
LCS2	Manganese Total ICAP/MS		100	105	ug/L	105	(85-115)	20	1.9
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.06	ug/L	103	(50-150)		
MS_202009170644	Manganese Total ICAP/MS	79	100	183	ug/L	104	(70-130)		
MS2_202009210107	Manganese Total ICAP/MS	3.1	100	106	ug/L	103	(70-130)		
MSD_202009170644	Manganese Total ICAP/MS	79	100	173	ug/L	94	(70-130)	20	5.6
MSD2_202009210107	Manganese Total ICAP/MS	3.1	100	102	ug/L	100	(70-130)	20	3.2
LCS1	Uranium ICAP/MS		50	50.0	ug/L	100	(85-115)		
LCS2	Uranium ICAP/MS		50	50.5	ug/L	101	(85-115)	20	1
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	1.00	ug/L	100	(50-150)		
MS_202009170644	Uranium ICAP/MS	85	50	140	ug/L	111	(70-130)		
MS2_202009210107	Uranium ICAP/MS	5.2	50	56.1	ug/L	102	(70-130)		
MSD_202009170644	Uranium ICAP/MS	85	50	134	ug/L	99	(70-130)	20	4.6
MSD2_202009210107	Uranium ICAP/MS	5.2	50	54.4	ug/L	98	(70-130)	20	3.1

<b>ICPMS Metals by EPA 200.8</b>									
<b>Analytical Batch: 1278449</b>					<b>Analysis Date: 10/02/2020</b>				
LCS1	Arsenic Total ICAP/MS		50	50.3	ug/L	101	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	49.7	ug/L	100	(85-115)	20	1.2
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.34	ug/L	134	(50-150)		
MS_202010010248	Arsenic Total ICAP/MS	3.2	50	63.0	ug/L	120	(70-130)		
MS2_202009290495	Arsenic Total ICAP/MS	ND	50	61.4	ug/L	121	(70-130)		
MSD_202010010248	Arsenic Total ICAP/MS	3.2	50	63.3	ug/L	120	(70-130)	20	0.49
MSD2_202009290495	Arsenic Total ICAP/MS	ND	50	58.9	ug/L	116	(70-130)	20	4.2
LCS1	Manganese Total ICAP/MS		100	104	ug/L	104	(85-115)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Manganese Total ICAP/MS		100	106	ug/L	106	(85-115)	20	1.9
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.06	ug/L	103	(50-150)		
MS_202010010248	Manganese Total ICAP/MS	ND	100	111	ug/L	111	(70-130)		
MS2_202009290495	Manganese Total ICAP/MS	39	100	152	ug/L	112	(70-130)		
MSD_202010010248	Manganese Total ICAP/MS	ND	100	109	ug/L	109	(70-130)	20	1.5
MSD2_202009290495	Manganese Total ICAP/MS	39	100	146	ug/L	107	(70-130)	20	3.7
LCS1	Uranium ICAP/MS		50	51.2	ug/L	102	(85-115)		
LCS2	Uranium ICAP/MS		50	52.0	ug/L	104	(85-115)	20	1.6
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	1.01	ug/L	101	(50-150)		
MS_202010010248	Uranium ICAP/MS	3.7	50	64.3	ug/L	121	(70-130)		
MS2_202009290495	Uranium ICAP/MS	ND	50	57.8	ug/L	115	(70-130)		
MSD_202010010248	Uranium ICAP/MS	3.7	50	63.6	ug/L	120	(70-130)	20	1.1
MSD2_202009290495	Uranium ICAP/MS	ND	50	56.0	ug/L	111	(70-130)	20	3.2

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 10/05/2020

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, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 10/05/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 10/05/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)\*

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required

Approved by

Date of Issue: 10/05/2020

Quant Report - Page 1 of 1

Tel Fax

## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-38825-1  
Client Project/Site: 893261

For:  
Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:  
9/24/2020 9:44:39 AM

Lori Thompson, Project Manager I  
(714)895-5494  
[Lori.Thompson@eurofinset.com](mailto:Lori.Thompson@eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*





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# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 893261

Job ID: 570-38825-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 893261

Job ID: 570-38825-1

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**Job ID: 570-38825-1**

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**Laboratory: Eurofins Calscience LLC**

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**Narrative**

**Job Narrative**  
**570-38825-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 9/18/2020 12:15 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.5° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS) associated with preparation batch 570-96483. LCS/LCSD was performed to meet QC requirement.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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# Detection Summary

Client: Eurofins Eaton Analytical  
Project/Site: 893261

Job ID: 570-38825-1

**Client Sample ID: 202009170169**

**Lab Sample ID: 570-38825-1**

No Detections.

**Client Sample ID: 202009170179**

**Lab Sample ID: 570-38825-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	0.865	J	0.961	0.768	mg/L	1		1664A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 893261

Job ID: 570-38825-1

## General Chemistry

**Client Sample ID: 202009170169**

**Date Collected: 09/17/20 08:27**

**Date Received: 09/18/20 12:15**

**Lab Sample ID: 570-38825-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.972	0.777	mg/L		09/23/20 06:55	09/23/20 06:55	1

**Client Sample ID: 202009170179**

**Date Collected: 09/17/20 10:27**

**Date Received: 09/18/20 12:15**

**Lab Sample ID: 570-38825-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	0.865	J	0.961	0.768	mg/L		09/23/20 06:55	09/23/20 06:55	1

# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 893261

Job ID: 570-38825-1

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 570-96483/1-A**  
**Matrix: Water**  
**Analysis Batch: 96556**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 96483**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		09/23/20 06:55	09/23/20 06:55	1

**Lab Sample ID: LCS 570-96483/2-A**  
**Matrix: Water**  
**Analysis Batch: 96556**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 96483**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	37.50		mg/L		94	78 - 114

**Lab Sample ID: LCSD 570-96483/3-A**  
**Matrix: Water**  
**Analysis Batch: 96556**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 96483**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	37.30		mg/L		93	78 - 114	1	18

**Lab Sample ID: 570-38821-B-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 96556**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 96483**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	1.04		38.1	35.94		mg/L		92	78 - 114

# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 893261

Job ID: 570-38825-1

## General Chemistry

### Prep Batch: 96483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-38825-1	202009170169	Total/NA	Water	1664A	
570-38825-2	202009170179	Total/NA	Water	1664A	
MB 570-96483/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-96483/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-96483/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
570-38821-B-1-A MS	Matrix Spike	Total/NA	Water	1664A	

### Analysis Batch: 96556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-38825-1	202009170169	Total/NA	Water	1664A	96483
570-38825-2	202009170179	Total/NA	Water	1664A	96483
MB 570-96483/1-A	Method Blank	Total/NA	Water	1664A	96483
LCS 570-96483/2-A	Lab Control Sample	Total/NA	Water	1664A	96483
LCSD 570-96483/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	96483
570-38821-B-1-A MS	Matrix Spike	Total/NA	Water	1664A	96483

# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 893261

Job ID: 570-38825-1

**Client Sample ID: 202009170169**

**Lab Sample ID: 570-38825-1**

**Date Collected: 09/17/20 08:27**

**Matrix: Water**

**Date Received: 09/18/20 12:15**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1029 mL	1000 mL	96483	09/23/20 06:55	ULIN	ECL 1
Total/NA	Analysis	1664A		1			96556	09/23/20 06:55	ULIN	ECL 1

Instrument ID: NOEQUIP

**Client Sample ID: 202009170179**

**Lab Sample ID: 570-38825-2**

**Date Collected: 09/17/20 10:27**

**Matrix: Water**

**Date Received: 09/18/20 12:15**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1041 mL	1000 mL	96483	09/23/20 06:55	ULIN	ECL 1
Total/NA	Analysis	1664A		1			96556	09/23/20 06:55	ULIN	ECL 1

Instrument ID: NOEQUIP

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 893261

Job ID: 570-38825-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20



# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 893261

Job ID: 570-38825-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

**Protocol References:**

1664A = EPA-821-98-002

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 893261

Job ID: 570-38825-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-38825-1	202009170169	Water	09/17/20 08:27	09/18/20 12:15	
570-38825-2	202009170179	Water	09/17/20 10:27	09/18/20 12:15	

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38825

Date: 9/18/20

Submittal Form

REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder# 893261 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature.

Reports: Jackie Contreras Sub-Contracting Administrator  
EMAIL TO: us20\_subcontract@eurofinsus.com  
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
Phone (626) 386-1165 Fax (626) 386-1122  
Invoices to: Eurofins Eaton Analytical, LLC  
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix  
Samples from: CALIFORNIA

eurofins Eaton Analytical

Ship To:  
Eurofins CalScience  
7440 Lincoln Way  
Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 893261 Report Due: 10/01/2020

Sample ID: 202009170169 Client Sample ID for reference on: LH-INF-20200917

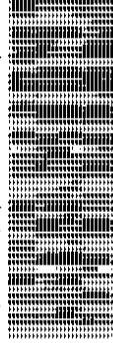
Sample type: Sample Event: Facility ID: Sample Point ID: Static ID:

Method: EPA 1664 Prep Method: Analysis Requested: Oil and Grease by 1664(subbed)

Sample ID: 202009170179 Client Sample ID for reference on: MB-INF-20200917

Sample type: Sample Event: Facility ID: Sample Point ID: Static ID:

Method: EPA 1664 Prep Method: Analysis Requested: Oil and Grease by 1664(subbed)



570-36825 Chain of Custody

Relinquished by: [Signature]

Sample Control

Received by: [Signature]

Sample Control

Relinquished by:

Sample Control

Received by:

Sample Control

Date: 9/18/20 Time: 12:15

Date: 9/18/2020 Time: 12:15

Date: Time

Date: Time

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

1-9/1-5 526

# Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-38825-1

**Login Number: 38825**

**List Number: 1**

**Creator: Le, Danny**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles

Date of Issue  
10/06/2020

*Sophia Liang*  
EUROFINS EATON  
ANALYTICAL, LLC



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 894497  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			



### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 894497  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **September 24, 2020 at 1227**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202009240155</u>	GAC-1M-20200924 Static ID: 537.1 @537.1	09/24/2020 0840
<u>202009240156</u>	GAC-2M-20200924 Static ID: 537.1 @537.1	09/24/2020 0843
<u>202009240157</u>	GAC-3M-20200924 Static ID: 537.1 @537.1	09/24/2020 0846
<u>202009240158</u>	GAC-4M-20200924 Static ID: 537.1 @537.1	09/24/2020 0849
<u>202009240159</u>	IX-1M-20200924 Static ID: 537.1 @537.1	09/24/2020 0852
<u>202009240160</u>	IX-2M-20200924 Static ID: 537.1 @537.1	09/24/2020 0855
<u>202009240161</u>	IX-3M-20200924 Static ID: 537.1 @537.1	09/24/2020 0858
<u>202009240162</u>	IX-4M-20200924 Static ID: 537.1 @537.1	09/24/2020 0901
<u>202009240163</u>	GAC-5M-20200924 Static ID: 537.1 @537.1	09/24/2020 1100
<u>202009240164</u>	GAC-6M-20200924 Static ID: 537.1 @537.1	09/24/2020 1103
<u>202009240165</u>	GAC-7M-20200924 Static ID: 537.1	09/24/2020 1106

**Acknowledgement of Samples Received**

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 894497  
Project: 0250000  
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

The following samples were received from you on **September 24, 2020 at 1227**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202009240166	GAC-8M-20200924 Static ID: 537.1	09/24/2020 1109
	@537.1	
202009240167	IX-5M-20200924 Static ID: 537.1	09/24/2020 1112
	@537.1	
202009240168	IX-6M-20200924 Static ID: 537.1	09/24/2020 1115
	@537.1	
202009240169	IX-7M-20200924 Static ID: 537.1	09/24/2020 1118
	@537.1	
202009240170	IX-8M-20200924 Static ID: 537.1	09/24/2020 1121
	@537.1	

**Test Description**

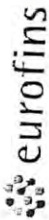
@537.1 -- EPA Method 537.1



894497

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302								
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang								
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) BC								
LABORATORY: Eurofins Eaton Analytical		<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.										
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD												
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rtorres@gsi-net.com. Provide EDD of sample results												
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	GAC-1M - 20200924	9/24/20	0840	Water	2		X		X			
	GAC-2M - 20200924		0843	Water					X			
	GAC-3M - 20200924		0846	Water					X			
	GAC-4M - 20200924		0849	Water					X			
	IX-1M - 20200924		0852	Water					X			
	IX-2M - 20200924		0855	Water					X			
	IX-3M - 20200924		0858	Water					X			
	IX-4M - 20200924		0901	Water					X			
	LH-NF-BC			Water					X	X	X	
	LH-NF-DUP-BC			Water					X	X	X	
	GAC-5M - 20200924	9/24/20	1100	Water	2				X			
	GAC-6M - 20200924		1103	Water					X			
	GAC-7M - 20200924		1106	Water					X			
	GAC-8M - 20200924		1109	Water					X			
Relinquished by: (Signature)						Received by: (Signature)		Date: 9/24/20		Time: 1226		
Relinquished by: (Signature)						Received by: (Signature)		Date: 9/24/20		Time: 1227		
Relinquished by: (Signature)						Received by: (Signature)		Date:		Time:		





Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 894497

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASiMs know. ASiMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 616 (Observation = 12.1 °C) (Corr. Factor -0.3 °C) (Final = 11.8 °C)

TYPE OF ICE: Real  Synthetic  No Ice

CONDITION OF ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

7) VOA and Radon Headspace: \_\_\_\_\_ Results: \_\_\_\_\_

No Samples with Headspace:  Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:	None/<6	>6mm	None/<6	>6mm
Sample ID	None/<6	>6mm	None/<6	>6mm
Bottle #				
Sample ID	None/<6	>6mm	None/<6	>6mm
Bottle #				

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors):

RECEIVED BY: Chris Boehk SIGNATURE

COMPANY/VTITLE: Eurofins Eaton Analytical

DATE: 9.24.20

TIME: 1227

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 894497  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202009240155      <u>GAC-1M-20200924</u></b>						
09/28/2020 19:16	Perfluorobutanesulfonic acid (PFBS)		0.0027		ug/L	0.0020
09/28/2020 19:16	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
09/28/2020 19:16	Perfluorooctanoic acid (PFOA)		0.0027		ug/L	0.0020
<b>202009240157      <u>GAC-3M-20200924</u></b>						
09/28/2020 19:35	Perfluorobutanesulfonic acid (PFBS)		0.0047		ug/L	0.0020
09/28/2020 19:35	Perfluorohexanoic acid (PFHxA)		0.0026		ug/L	0.0020
09/28/2020 19:35	Perfluorooctanoic acid (PFOA)		0.0026		ug/L	0.0020
<b>202009240158      <u>GAC-4M-20200924</u></b>						
09/28/2020 19:45	Perfluorooctanesulfonic acid (PFOS)		0.0020		ug/L	0.0020
<b>202009240159      <u>IX-1M-20200924</u></b>						
09/29/2020 04:32	Perfluorohexanoic acid (PFHxA)		0.0028		ug/L	0.0020
09/29/2020 04:32	Perfluorooctanesulfonic acid (PFOS)		0.0038		ug/L	0.0020
09/29/2020 04:32	Perfluorooctanoic acid (PFOA)		0.0072		ug/L	0.0020
<b>202009240160      <u>IX-2M-20200924</u></b>						
09/29/2020 04:42	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
09/29/2020 04:42	Perfluorooctanoic acid (PFOA)		0.0084		ug/L	0.0020
<b>202009240161      <u>IX-3M-20200924</u></b>						
09/29/2020 04:51	Perfluorobutanesulfonic acid (PFBS)		0.0029		ug/L	0.0020
09/29/2020 04:51	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
09/29/2020 04:51	Perfluorooctanoic acid (PFOA)		0.0085		ug/L	0.0020
<b>202009240162      <u>IX-4M-20200924</u></b>						
09/29/2020 05:10	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
09/29/2020 05:10	Perfluorooctanoic acid (PFOA)		0.0076		ug/L	0.0020
<b>202009240163      <u>GAC-5M-20200924</u></b>						
09/29/2020 05:20	Perfluorobutanesulfonic acid (PFBS)		0.0092		ug/L	0.0020
09/29/2020 05:20	Perfluoroheptanoic acid (PFHpA)		0.0035		ug/L	0.0020
09/29/2020 05:20	Perfluorohexanesulfonic acid (PFHxS)		0.0032		ug/L	0.0020
09/29/2020 05:20	Perfluorohexanoic acid (PFHxA)		0.0063		ug/L	0.0020
09/29/2020 05:20	Perfluorooctanesulfonic acid (PFOS)		0.010		ug/L	0.0020
09/29/2020 05:20	Perfluorooctanoic acid (PFOA)		0.0099		ug/L	0.0020
<b>202009240164      <u>GAC-6M-20200924</u></b>						
09/29/2020 05:30	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
09/29/2020 05:30	Perfluoroheptanoic acid (PFHpA)		0.0038		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
09/29/2020 05:30	Perfluorohexanesulfonic acid (PFHxS)		0.0026		ug/L	0.0020
09/29/2020 05:30	Perfluorohexanoic acid (PFHxA)		0.0076		ug/L	0.0020
09/29/2020 05:30	Perfluorooctanoic acid (PFOA)		0.0071		ug/L	0.0020
		<b>202009240165      <u>GAC-7M-20200924</u></b>				
09/29/2020 05:39	Perfluorobutanesulfonic acid (PFBS)		0.010		ug/L	0.0020
09/29/2020 05:39	Perfluoroheptanoic acid (PFHpA)		0.0035		ug/L	0.0020
09/29/2020 05:39	Perfluorohexanesulfonic acid (PFHxS)		0.0039		ug/L	0.0020
09/29/2020 05:39	Perfluorohexanoic acid (PFHxA)		0.0064		ug/L	0.0020
09/29/2020 05:39	Perfluorooctanesulfonic acid (PFOS)		0.0090		ug/L	0.0020
09/29/2020 05:39	Perfluorooctanoic acid (PFOA)		0.010		ug/L	0.0020
		<b>202009240166      <u>GAC-8M-20200924</u></b>				
09/29/2020 05:49	Perfluorobutanesulfonic acid (PFBS)		0.0066		ug/L	0.0020
09/29/2020 05:49	Perfluoroheptanoic acid (PFHpA)		0.0024		ug/L	0.0020
09/29/2020 05:49	Perfluorohexanesulfonic acid (PFHxS)		0.0021		ug/L	0.0020
09/29/2020 05:49	Perfluorohexanoic acid (PFHxA)		0.0049		ug/L	0.0020
09/29/2020 05:49	Perfluorooctanesulfonic acid (PFOS)		0.0073		ug/L	0.0020
09/29/2020 05:49	Perfluorooctanoic acid (PFOA)		0.0064		ug/L	0.0020
		<b>202009240167      <u>IX-5M-20200924</u></b>				
09/29/2020 05:58	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
09/29/2020 05:58	Perfluorohexanoic acid (PFHxA)		0.0044		ug/L	0.0020
09/29/2020 05:58	Perfluorooctanoic acid (PFOA)		0.0066		ug/L	0.0020
		<b>202009240168      <u>IX-6M-20200924</u></b>				
09/29/2020 06:08	Perfluoroheptanoic acid (PFHpA)		0.0029		ug/L	0.0020
09/29/2020 06:08	Perfluorohexanoic acid (PFHxA)		0.0050		ug/L	0.0020
09/29/2020 06:08	Perfluorooctanoic acid (PFOA)		0.0084		ug/L	0.0020
		<b>202009240169      <u>IX-7M-20200924</u></b>				
09/29/2020 06:18	Perfluorobutanesulfonic acid (PFBS)		0.0037		ug/L	0.0020
09/29/2020 06:18	Perfluoroheptanoic acid (PFHpA)		0.0035		ug/L	0.0020
09/29/2020 06:18	Perfluorohexanoic acid (PFHxA)		0.0059		ug/L	0.0020
09/29/2020 06:18	Perfluorooctanoic acid (PFOA)		0.010		ug/L	0.0020
		<b>202009240170      <u>IX-8M-20200924</u></b>				
10/02/2020 19:55	Perfluorobutanesulfonic acid (PFBS)		0.0023		ug/L	0.0020
10/02/2020 19:55	Perfluoroheptanoic acid (PFHpA)		0.0034		ug/L	0.0020
10/02/2020 19:55	Perfluorohexanoic acid (PFHxA)		0.0057		ug/L	0.0020
10/02/2020 19:55	Perfluorooctanoic acid (PFOA)		0.010		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**



Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1M-20200924 (202009240155)</b>						<b>Sampled on 09/24/2020 0840</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0027	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0027	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	13C2-PFDA	104	%		1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	13C2-PFHxA	114	%		1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	13C3-HFPO-DA	99	%		1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	d3-NMeFOSAA	105	%		1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	d5-NEtFOSAA	110	%		1

<b>GAC-2M-20200924 (202009240156)</b>						<b>Sampled on 09/24/2020 0843</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	13C2-PFDA	103	%		1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	13C2-PFHxA	112	%		1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	13C3-HFPO-DA	99	%		1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	d3-NMeFOSAA	108	%		1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**GAC-3M-20200924 (202009240157)**

Sampled on 09/24/2020 0846

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0047	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0026	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0026	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	13C2-PFDA	102	%		1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	13C2-PFHxA	116	%		1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	13C3-HFPO-DA	98	%		1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	d3-NMeFOSAA	106	%		1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**GAC-4M-20200924 (202009240158)**

Sampled on 09/24/2020 0849

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0020	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	13C2-PFDA	107	%		1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	13C2-PFHxA	117	%		1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	13C2-PFOA- IS#1	118	%		1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	13C3-HFPO-DA	102	%		1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	d3-NMeFOSAA	107	%		1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	d5-NEtFOSAA	110	%		1

**IX-1M-20200924 (202009240159)**

Static ID: 537.1

Sampled on 09/24/2020 0852

**EPA 537.1 - EPA Method 537.1**

09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0028	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0038	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0072	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	13C2-PFDA	112	%		1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	13C2-PFHxA	116	%		1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	103	%		1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	124	%		1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**IX-2M-20200924 (202009240160)**

**Sampled on 09/24/2020 0855**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0084	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	13C2-PFDA	110	%		1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	13C2-PFHxA	114	%		1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	102	%		1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	121	%		1

Rounding on totals after summation.  
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Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	104	%		1
<b>IX-3M-20200924 (202009240161)</b>					<b>Sampled on 09/24/2020 0858</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0029	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0085	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	13C2-PFDA	109	%		1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	13C2-PFHxA	114	%		1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	103	%		1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	126	%		1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**IX-4M-20200924 (202009240162)**

**Sampled on 09/24/2020 0901**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0076	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	13C2-PFDA	112	%		1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	13C2-PFHxA	115	%		1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	103	%		1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	125	%		1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**GAC-5M-20200924 (202009240163)**

Sampled on 09/24/2020 1100

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0092	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0035	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0032	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.010	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0099	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	13C2-PFDA	113	%		1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	13C2-PFHxA	115	%		1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	118	%		1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	101	%		1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	127	%		1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	106	%		1

**GAC-6M-20200924 (202009240164)**

**Sampled on 09/24/2020 1103**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0038	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0026	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0076	ug/L	0.0020	1

Rounding on totals after summation.  
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 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0071	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	13C2-PFDA	111	%		1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	13C2-PFHxA	116	%		1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	103	%		1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	126	%		1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	107	%		1

**GAC-7M-20200924 (202009240165)**

Sampled on 09/24/2020 1106

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0035	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0039	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0090	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.010	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	13C2-PFDA	109	%		1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	13C2-PFHxA	111	%		1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	100	%		1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	128	%		1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**GAC-8M-20200924 (202009240166)**

Sampled on 09/24/2020 1109

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0066	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0024	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0021	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0049	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0073	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0064	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	13C2-PFDA	112	%		1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	13C2-PFHxA	113	%		1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	118	%		1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	103	%		1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	127	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	107	%		1
<b>IX-5M-20200924 (202009240167)</b>						<b>Sampled on 09/24/2020 1112</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0044	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0066	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	13C2-PFDA	119	%		1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	13C2-PFHxA	119	%		1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	108	%		1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	128	%		1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	109	%		1

<b>IX-6M-20200924 (202009240168)</b>						<b>Sampled on 09/24/2020 1115</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0029	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0050	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0084	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	13C2-PFDA	112	%		1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	13C2-PFHxA	113	%		1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	102	%		1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	129	%		1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**IX-7M-20200924 (202009240169)**

Sampled on 09/24/2020 1118

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0037	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0035	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0059	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.010	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	13C2-PFDA	115	%		1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	13C2-PFHxA	115	%		1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	104	%		1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	126	%		1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	106	%		1

**IX-8M-20200924 (202009240170)**

Sampled on 09/24/2020 1121

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0023	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0034	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0057	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.010	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	13C2-PFDA	111	%		1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	13C2-PFHxA	117	%		1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	13C3-HFPO-DA	108	%		1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	d3-NMeFOSAA	94	%		1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	d5-NEtFOSAA	113	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 894497  
Project: 0250000  
Group: WRD Pilot [Set #2]

Water Replenishment District

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**EPA Method 537.1**

**Prep Batch: 1277258 Analytical Batch: 1277603**

202009240155	GAC-1M-20200924
202009240156	GAC-2M-20200924
202009240157	GAC-3M-20200924
202009240158	GAC-4M-20200924

**Analysis Date: 09/28/2020**

Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ

**EPA Method 537.1**

**Prep Batch: 1277343 Analytical Batch: 1277610**

202009240159	IX-1M-20200924
202009240160	IX-2M-20200924
202009240161	IX-3M-20200924
202009240162	IX-4M-20200924
202009240163	GAC-5M-20200924
202009240164	GAC-6M-20200924
202009240165	GAC-7M-20200924
202009240166	GAC-8M-20200924
202009240167	IX-5M-20200924
202009240168	IX-6M-20200924
202009240169	IX-7M-20200924

**Analysis Date: 09/29/2020**

Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ

**EPA Method 537.1**

**Prep Batch: 1278072 Analytical Batch: 1278774**

202009240170	IX-8M-20200924
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**Analysis Date: 10/02/2020**

Analyzed by: Y7BM

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Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>EPA Method 537.1 by EPA 537.1</b>									
<b>Prep Batch: 1277258 Analytical Batch: 1277603</b>					<b>Analysis Date: 09/28/2020</b>				
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0501	ug/L	106	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0499	ug/L	106	(70-130)	30	0.20
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00198	ug/L	105	(50-150)		
MS1_202009230118	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0227	ug/L	97	(70-130)		
MSD1_202009230118	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0248	ug/L	105	(70-130)	30	8.6
LCS3	13C2-PFDA (S)		100	101	%	101	(70-130)		
LCS4	13C2-PFDA (S)		100	99.2	%	99	(70-130)		
MBLK	13C2-PFDA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.8	%	99	(70-130)		
MS1_202009230118	13C2-PFDA (S)		100	98.5	%	98	(70-130)		
MSD1_202009230118	13C2-PFDA (S)		100	108	%	109	(70-130)		
LCS3	13C2-PFHxA (S)		100	112	%	112	(70-130)		
LCS4	13C2-PFHxA (S)		100	118	%	118	(70-130)		
MBLK	13C2-PFHxA (S)			122	%	122	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	110	%	111	(70-130)		
MS1_202009230118	13C2-PFHxA (S)		100	114	%	114	(70-130)		
MSD1_202009230118	13C2-PFHxA (S)		100	126	%	126	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	113	%	113	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	114	%	115	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			119	%	119	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	124	%	124	(50-150)		
MS1_202009230118	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
MSD1_202009230118	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	98.0	%	98	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MBLK	13C3-HFPO-DA (S)			102	%	102	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	94.3	%	94	(70-130)		
MS1_202009230118	13C3-HFPO-DA (S)		100	99.1	%	99	(70-130)		
MSD1_202009230118	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	98.8	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			100	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS1_202009230118	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.



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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD1_202009230118	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0504	ug/L	104	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0495	ug/L	102	(70-130)	30	1.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00205	ug/L	109	(50-150)		
MS1_202009230118	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0235	ug/L	100	(70-130)		
MSD1_202009230118	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0264	ug/L	112	(70-130)	30	12
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0492	ug/L	106	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0493	ug/L	106	(70-130)	30	0.61
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00200	ug/L	108	(50-150)		
MS1_202009230118	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0227	ug/L	97	(70-130)		
MSD1_202009230118	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0247	ug/L	106	(70-130)	30	8.5
LCS3	d3-NMeFOSAA (I)		100	99.0	%	99	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	96.7	%	97	(50-150)		
MBLK	d3-NMeFOSAA (I)			98.8	%	99	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MS1_202009230118	d3-NMeFOSAA (I)		100	98.7	%	99	(50-150)		
MSD1_202009230118	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	108	%	108	(70-130)		
MBLK	d5-NEtFOSAA (S)			115	%	115	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MS1_202009230118	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MSD1_202009230118	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0485	ug/L	97	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0489	ug/L	98	(70-130)	30	1.9
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00191	ug/L	96	(50-150)		
MS1_202009230118	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0223	ug/L	89	(70-130)		
MSD1_202009230118	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0246	ug/L	98	(70-130)	30	9.6
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0530	ug/L	106	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0529	ug/L	106	(70-130)	30	0.19
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00244	ug/L	122	(50-150)		
MS1_202009230118	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0243	ug/L	97	(70-130)		
MSD1_202009230118	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0258	ug/L	103	(70-130)	30	6.0
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0540	ug/L	108	(70-130)		

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0530	ug/L	106	(70-130)	30	1.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00243	ug/L	121	(50-150)		
MS1_202009230118	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0248	ug/L	99	(70-130)		
MSD1_202009230118	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0261	ug/L	104	(70-130)	30	5.0
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0496	ug/L	112	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0506	ug/L	114	(70-130)	30	1.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00206	ug/L	116	(50-150)		
MS1_202009230118	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0228	ug/L	103	(70-130)		
MSD1_202009230118	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0253	ug/L	114	(70-130)	30	10
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0513	ug/L	103	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0481	ug/L	96	(70-130)	30	5.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202009230118	Perfluorodecanoic acid (PFDA)		0.025	0.0226	ug/L	91	(70-130)		
MSD1_202009230118	Perfluorodecanoic acid (PFDA)		0.025	0.0252	ug/L	101	(70-130)	30	11
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0503	ug/L	101	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0480	ug/L	96	(70-130)	30	4.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00195	ug/L	97	(50-150)		
MS1_202009230118	Perfluorododecanoic acid (PFDoA)		0.025	0.0224	ug/L	90	(70-130)		
MSD1_202009230118	Perfluorododecanoic acid (PFDoA)		0.025	0.0245	ug/L	98	(70-130)	30	8.9
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0566	ug/L	113	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0553	ug/L	111	(70-130)	30	3.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00234	ug/L	117	(50-150)		
MS1_202009230118	Perfluoroheptanoic acid (PFHpA)		0.025	0.0260	ug/L	104	(70-130)		
MSD1_202009230118	Perfluoroheptanoic acid (PFHpA)		0.025	0.0288	ug/L	115	(70-130)	30	10
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0519	ug/L	114	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0520	ug/L	114	(70-130)	30	0.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00205	ug/L	113	(50-150)		
MS1_202009230118	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0233	ug/L	102	(70-130)		
MSD1_202009230118	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0264	ug/L	116	(70-130)	30	12
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0540	ug/L	108	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0546	ug/L	109	(70-130)	30	1.3
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.  
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 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 894497  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00232	ug/L	116	(50-150)		
MS1_202009230118	Perfluorohexanoic acid (PFHxA)		0.025	0.0259	ug/L	104	(70-130)		
MSD1_202009230118	Perfluorohexanoic acid (PFHxA)		0.025	0.0278	ug/L	111	(70-130)	30	7.1
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0522	ug/L	104	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0509	ug/L	102	(70-130)	30	2.1
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00218	ug/L	109	(50-150)		
MS1_202009230118	Perfluorononanoic acid (PFNA)		0.025	0.0242	ug/L	97	(70-130)		
MSD1_202009230118	Perfluorononanoic acid (PFNA)		0.025	0.0267	ug/L	107	(70-130)	30	9.7
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0525	ug/L	113	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0514	ug/L	111	(70-130)	30	1.2
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00211	ug/L	114	(50-150)		
MS1_202009230118	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0235	ug/L	101	(70-130)		
MSD1_202009230118	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0256	ug/L	110	(70-130)	30	8.7
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0543	ug/L	109	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0524	ug/L	105	(70-130)	30	3.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00227	ug/L	114	(50-150)		
MS1_202009230118	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0248	ug/L	99	(70-130)		
MSD1_202009230118	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0276	ug/L	110	(70-130)	30	11
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0600	ug/L	120	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0509	ug/L	102	(70-130)	30	16
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202009230118	Perfluorotetradecanoic acid (PFTA)		0.025	0.0258	ug/L	103	(70-130)		
MSD1_202009230118	Perfluorotetradecanoic acid (PFTA)		0.025	0.0247	ug/L	99	(70-130)	30	4.5
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0525	ug/L	105	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0504	ug/L	101	(70-130)	30	5.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00203	ug/L	102	(50-150)		
MS1_202009230118	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0229	ug/L	92	(70-130)		
MSD1_202009230118	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0255	ug/L	102	(70-130)	30	11
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0504	ug/L	101	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0484	ug/L	97	(70-130)	30	3.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00205	ug/L	102	(50-150)		
MS1_202009230118	Perfluoroundecanoic acid (PFUnA)		0.025	0.0226	ug/L	90	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD1_202009230118	Perfluoroundecanoic acid (PFUnA)		0.025	0.0247	ug/L	99	(70-130)	30	8.9

EPA Method 537.1 by EPA 537.1

Prep Batch: 1277343 Analytical Batch: 1277610

Analysis Date: 09/29/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0237	ug/L	101	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0233	ug/L	99	(70-130)	30	1.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00204	ug/L	109	(50-150)		
MS_202009250044	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00193	ug/L	102	(50-150)		
MSD_202009250044	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00194	ug/L	103	(50-150)	50	0.61
LCS1	13C2-PFDA (S)		100	116	%	116	(70-130)		
LCS2	13C2-PFDA (S)		100	109	%	109	(70-130)		
MBLK	13C2-PFDA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	116	%	116	(70-130)		
MS_202009250044	13C2-PFDA (S)		100	115	%	115	(70-130)		
MSD_202009250044	13C2-PFDA (S)		100	112	%	112	(70-130)		
LCS1	13C2-PFHxA (S)		100	120	%	121	(70-130)		
LCS2	13C2-PFHxA (S)		100	113	%	113	(70-130)		
MBLK	13C2-PFHxA (S)			110	%	110	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	116	%	116	(70-130)		
MS_202009250044	13C2-PFHxA (S)		100	120	%	120	(70-130)		
MSD_202009250044	13C2-PFHxA (S)		100	115	%	115	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	119	%	119	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			119	%	119	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	118	%	118	(50-150)		
MS_202009250044	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
MSD_202009250044	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	99.6	%	100	(70-130)		
MBLK	13C3-HFPO-DA (S)			96.3	%	96	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MS_202009250044	13C3-HFPO-DA (S)		100	108	%	109	(70-130)		
MSD_202009250044	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202009250044	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MSD_202009250044	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0256	ug/L	109	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0257	ug/L	109	(70-130)	30	0.39
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00222	ug/L	117	(50-150)		
MS_202009250044	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00224	ug/L	115	(50-150)		
MSD_202009250044	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00221	ug/L	113	(50-150)	50	1.6
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0244	ug/L	105	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0247	ug/L	106	(70-130)	30	1.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00209	ug/L	112	(50-150)		
MS_202009250044	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00202	ug/L	108	(50-150)		
MSD_202009250044	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00199	ug/L	107	(50-150)	50	1.4
LCS1	d3-NMeFOSAA (I)		100	123	%	123	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	125	%	125	(50-150)		
MBLK	d3-NMeFOSAA (I)			120	%	120	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	121	%	121	(50-150)		
MS_202009250044	d3-NMeFOSAA (I)		100	123	%	123	(50-150)		
MSD_202009250044	d3-NMeFOSAA (I)		100	123	%	123	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MBLK	d5-NEtFOSAA (S)			111	%	111	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
MS_202009250044	d5-NEtFOSAA (S)		100	118	%	118	(70-130)		
MSD_202009250044	d5-NEtFOSAA (S)		100	113	%	113	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0247	ug/L	99	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0240	ug/L	96	(70-130)	30	2.9
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00200	ug/L	100	(50-150)		
MS_202009250044	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00200	ug/L	99	(50-150)		
MSD_202009250044	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00198	ug/L	98	(50-150)	50	0.93
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0245	ug/L	98	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0249	ug/L	100	(70-130)	30	1.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00204	ug/L	102	(50-150)		
MS_202009250044	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00236	ug/L	118	(50-150)		
MSD_202009250044	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00224	ug/L	112	(50-150)	50	5.0

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0260	ug/L	104	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0256	ug/L	102	(70-130)	30	1.6
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00240	ug/L	120	(50-150)		
MS_202009250044	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00218	ug/L	107	(50-150)		
MSD_202009250044	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00221	ug/L	109	(50-150)	50	1.5
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0237	ug/L	107	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0243	ug/L	110	(70-130)	30	2.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00206	ug/L	117	(50-150)		
MS_202009250044	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00198	ug/L	109	(50-150)		
MSD_202009250044	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00203	ug/L	112	(50-150)	50	2.3
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0268	ug/L	107	(70-130)	30	0.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00230	ug/L	115	(50-150)		
MS_202009250044	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00226	ug/L	111	(50-150)		
MSD_202009250044	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00223	ug/L	110	(50-150)	50	1.3
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0251	ug/L	100	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0241	ug/L	96	(70-130)	30	4.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202009250044	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00217	ug/L	108	(50-150)		
MSD_202009250044	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00214	ug/L	106	(50-150)	50	1.5
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0274	ug/L	110	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0279	ug/L	111	(70-130)	30	1.8
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00238	ug/L	119	(50-150)		
MS_202009250044	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00242	ug/L	121	(50-150)		
MSD_202009250044	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00240	ug/L	120	(50-150)	50	0.73
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0247	ug/L	108	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0250	ug/L	110	(70-130)	30	1.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00222	ug/L	122	(50-150)		
MS_202009250044	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00208	ug/L	114	(50-150)		
MSD_202009250044	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00208	ug/L	114	(50-150)	50	0.024
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0277	ug/L	111	(70-130)	30	3.3

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00232	ug/L	116	(50-150)		
MS_202009250044	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00241	ug/L	110	(50-150)		
MSD_202009250044	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00247	ug/L	113	(50-150)	50	2.5
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0270	ug/L	108	(70-130)	30	3.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00233	ug/L	117	(50-150)		
MS_202009250044	Perfluorononanoic acid (PFNA)	ND	0.002	0.00237	ug/L	114	(50-150)		
MSD_202009250044	Perfluorononanoic acid (PFNA)	ND	0.002	0.00236	ug/L	114	(50-150)	50	0.55
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0244	ug/L	105	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0248	ug/L	107	(70-130)	30	1.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00217	ug/L	117	(50-150)		
MS_202009250044	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00221	ug/L	111	(50-150)		
MSD_202009250044	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00216	ug/L	108	(50-150)	50	2.3
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0264	ug/L	105	(70-130)	30	0.76
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00232	ug/L	116	(50-150)		
MS_202009250044	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00235	ug/L	110	(50-150)		
MSD_202009250044	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00235	ug/L	110	(50-150)	50	0.13
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0228	ug/L	91	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0210	ug/L	84	(70-130)	30	8.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00191	ug/L	96	(50-150)		
MS_202009250044	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00200	ug/L	98	(50-150)		
MSD_202009250044	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00201	ug/L	99	(50-150)	50	0.44
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0255	ug/L	102	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0246	ug/L	99	(70-130)	30	3.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00215	ug/L	108	(50-150)		
MS_202009250044	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00208	ug/L	103	(50-150)		
MSD_202009250044	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00212	ug/L	105	(50-150)	50	2.0
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0273	ug/L	109	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0259	ug/L	104	(70-130)	30	5.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00235	ug/L	117	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 894497  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202009250044	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00244	ug/L	121	(50-150)		
MSD_202009250044	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00234	ug/L	117	(50-150)	50	4.3

EPA Method 537.1 by EPA 537.1

Prep Batch: 1278072 Analytical Batch: 1278774

Analysis Date: 10/02/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202009280433	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0269	ug/L	114	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0272	ug/L	116	(70-130)	30	1.1
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00197	ug/L	105	(50-150)		
MS_202009280443	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00196	ug/L	104	(50-150)		
DUP_202009280433	13C2-PFDA (S)			123	%	123	(70-130)		
LCS1	13C2-PFDA (S)		100	107	%	107	(70-130)		
LCS2	13C2-PFDA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFDA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	105	%	105	(70-130)		
MS_202009280443	13C2-PFDA (S)		100	129	%	129	(70-130)		
DUP_202009280433	13C2-PFHxA (S)			105	%	105	(70-130)		
LCS1	13C2-PFHxA (S)		100	117	%	117	(70-130)		
LCS2	13C2-PFHxA (S)		100	118	%	118	(70-130)		
MBLK	13C2-PFHxA (S)			121	%	121	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	118	%	118	(70-130)		
MS_202009280443	13C2-PFHxA (S)		100	92.7	%	93	(70-130)		
DUP_202009280433	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	113	%	113	(50-150)		
MS_202009280443	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
DUP_202009280433	13C3-HFPO-DA (S)			103	%	103	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
MBLK	13C3-HFPO-DA (S)			110	%	111	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
MS_202009280443	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
DUP_202009280433	13C4-PFOS- IS#2 (I)			98.9	%	99	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	95.9	%	96	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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(S) - Indicates surrogate compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C4-PFOS- IS#2 (I)			96.2	%	96	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MS_202009280443	13C4-PFOS- IS#2 (I)		100	99.6	%	100	(50-150)		
DUP_202009280433	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0306	ug/L	130	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0305	ug/L	129	(70-130)	30	0.33
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00231	ug/L	122	(50-150)		
MS_202009280443	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00224	ug/L	118	(50-150)		
DUP_202009280433	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0296	ug/L	127	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0299	ug/L	128	(70-130)	30	1.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00216	ug/L	116	(50-150)		
MS_202009280443	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00218	ug/L	117	(50-150)		
DUP_202009280433	d3-NMeFOSAA (I)			143	%	143	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	93.3	%	93	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	93.6	%	94	(50-150)		
MBLK	d3-NMeFOSAA (I)			90.4	%	90	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	97.1	%	97	(50-150)		
MS_202009280443	d3-NMeFOSAA (I)		100	148	%	148	(50-150)		
DUP_202009280433	d5-NEtFOSAA (S)			143	%	<b>143</b>	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MBLK	d5-NEtFOSAA (S)			112	%	112	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MS_202009280443	d5-NEtFOSAA (S)		100	147	%	<b>147</b>	(70-130)		
DUP_202009280433	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0280	ug/L	112	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0282	ug/L	113	(70-130)	30	0.71
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00211	ug/L	105	(50-150)		
MS_202009280443	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00220	ug/L	106	(50-150)		
DUP_202009280433	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0302	ug/L	121	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0302	ug/L	121	(70-130)	30	0.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00227	ug/L	113	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202009280443	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00282	ug/L	140	(50-150)		
DUP_202009280433	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0299	ug/L	120	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0304	ug/L	122	(70-130)	30	1.7
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00223	ug/L	111	(50-150)		
MS_202009280443	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00237	ug/L	117	(50-150)		
DUP_202009280433	Perfluorobutanesulfonic acid (PFBS)	0.0063		0.00658	ug/L		(0-30)	30	4.7
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0285	ug/L	129	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0276	ug/L	125	(70-130)	30	3.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00218	ug/L	123	(50-150)		
MS_202009280443	Perfluorobutanesulfonic acid (PFBS)	0.012	0.0018	0.0118	ug/L	<b>-0.0338</b>	(50-150)		
DUP_202009280433	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0281	ug/L	112	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0283	ug/L	113	(70-130)	30	0.71
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00207	ug/L	103	(50-150)		
MS_202009280443	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00260	ug/L	124	(50-150)		
DUP_202009280433	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0264	ug/L	106	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0260	ug/L	104	(70-130)	30	1.5
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00193	ug/L	97	(50-150)		
MS_202009280443	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00183	ug/L	89	(50-150)		
DUP_202009280433	Perfluoroheptanoic acid (PFHpA)	0.0036		0.00308	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0325	ug/L	130	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0324	ug/L	130	(70-130)	30	0.31
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00251	ug/L	125	(50-150)		
MS_202009280443	Perfluoroheptanoic acid (PFHpA)	0.0050	0.002	0.00743	ug/L	124	(50-150)		
DUP_202009280433	Perfluorohexanesulfonic acid (PFHxS)	0.016		0.0135	ug/L		(0-30)	30	16
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0296	ug/L	130	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0294	ug/L	129	(70-130)	30	0.68
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00224	ug/L	123	(50-150)		
MS_202009280443	Perfluorohexanesulfonic acid (PFHxS)	0.012	0.0018	0.0204	ug/L	<b>427</b>	(50-150)		
DUP_202009280433	Perfluorohexanoic acid (PFHxA)	0.0048		0.00478	ug/L		(0-30)		

Spike recovery is already corrected for native results.  
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Report: 894497  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0314	ug/L	125	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0316	ug/L	126	(70-130)	30	0.64
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00243	ug/L	122	(50-150)		
MS_202009280443	Perfluorohexanoic acid (PFHxA)	0.010	0.002	0.0117	ug/L	84	(50-150)		
DUP_202009280433	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0307	ug/L	123	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0307	ug/L	123	(70-130)	30	0.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00231	ug/L	116	(50-150)		
MS_202009280443	Perfluorononanoic acid (PFNA)	ND	0.002	0.00366	ug/L	145	(50-150)		
DUP_202009280433	Perfluorooctanesulfonic acid (PFOS)	0.030		0.0300	ug/L		(0-30)	30	0.033
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0278	ug/L	120	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0282	ug/L	122	(70-130)	30	1.4
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00215	ug/L	116	(50-150)		
MS_202009280443	Perfluorooctanesulfonic acid (PFOS)	0.013	0.0019	0.0165	ug/L	<b>201</b>	(50-150)		
DUP_202009280433	Perfluorooctanoic acid (PFOA)	0.0098		0.00934	ug/L		(0-30)	30	4.8
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0302	ug/L	121	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0302	ug/L	121	(70-130)	30	0.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00239	ug/L	119	(50-150)		
MS_202009280443	Perfluorooctanoic acid (PFOA)	0.015	0.002	0.0187	ug/L	<b>204</b>	(50-150)		
DUP_202009280433	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0281	ug/L	113	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0278	ug/L	111	(70-130)	30	1.1
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202009280443	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00272	ug/L	130	(50-150)		
DUP_202009280433	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0283	ug/L	113	(70-130)	30	0.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00203	ug/L	101	(50-150)		
MS_202009280443	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00242	ug/L	120	(50-150)		
DUP_202009280433	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0279	ug/L	112	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0277	ug/L	111	(70-130)	30	0.72

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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**Report:** 894497  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00211	ug/L	105	(50-150)		
MS_202009280443	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00291	ug/L	144	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Fecal Coliform Small, Fecal Coliform Large), MPN/100 mL (Fecal Coliform), and Presence/Absence (P/A)\* (Fecal Coliform).

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 10/05/2020

Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Pos Tubes (Tot, E., Coli), MPN/100ml (Tot, E., Coli), Pres/Abs (P/A)\* (Tot, E., Coli)

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required:
Comment:
Approved by:

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 10/05/2020

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



**Report of Analysis by 24-Hour Colilert Test for  
Presence or Absence, Quantification of Total Coliform and E. Coli  
By Quantitray**

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 10/05/2020

Quant Report - Page 1 of 1

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## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 895705  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 895705  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **October 01, 2020 at 1152**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202010010380</u>	GAC-1-20201001 Static ID: 537.1 @537.1	10/01/2020 0813
<u>202010010381</u>	GAC-2-20201001 Static ID: 537.1 @537.1	10/01/2020 0816
<u>202010010382</u>	GAC-3-20201001 Static ID: 537.1 @537.1	10/01/2020 0819
<u>202010010383</u>	GAC-4-20201001 Static ID: 537.1 @537.1	10/01/2020 0822
<u>202010010384</u>	IX-1-20201001 Static ID: 537.1 @537.1	10/01/2020 0825
<u>202010010385</u>	IX-2-20201001 Static ID: 537.1 @537.1	10/01/2020 0828
<u>202010010386</u>	IX-3-20201001 Static ID: 537.1 @537.1	10/01/2020 0831
<u>202010010387</u>	IX-4-20201001 Static ID: 537.1 @537.1	10/01/2020 0834
<u>202010010388</u>	GAC-5-20201001 Static ID: 537.1 @537.1	10/01/2020 1013
<u>202010010389</u>	GAC-6-20201001 Static ID: 537.1 @537.1	10/01/2020 1016
<u>202010010390</u>	GAC-7-20201001 Static ID: 537.1	10/01/2020 1019

**Acknowledgement of Samples Received**

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 895705  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **October 01, 2020** at **1152**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202010010391	GAC-8-20201001 Static ID: 537.1	10/01/2020 1022
	@537.1	
202010010392	IX-5-20201001 Static ID: 537.1	10/01/2020 1025
	@537.1	
202010010393	IX-6-20201001 Static ID: 537.1	10/01/2020 1028
	@537.1	
202010010394	IX-7-20201001 Static ID: 537.1	10/01/2020 1031
	@537.1	
202010010395	IX-8-20201001 Static ID: 537.1	10/01/2020 1034
	@537.1	

**Test Description**

@537.1 -- EPA Method 537.1



895705

FROM: GSI Environmental Inc.  
19200 Von Karman Ave, Suite 800  
Irvine, CA 92612  
(949) 679-1070

PROJECT NAME: WRD Pilot

PROJECT CONTACT: Miae Jeon

GLOBAL ID:

PROJECT NO.: 5302

LAB CONTACT: Sophia Liang

SAMPLER(S): (PRINT) RBT

TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com

LABORATORY: Eurofins Eaton Analytical

TURNAROUND TIME:  SAME DAY  24 HR  48 HR  STANDARD  
 72 HR  5 DAYS

SPECIAL INSTRUCTIONS:  
Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdiorres@gsi-net.com;  
Provide EDD of sample results

LAB USE ONLY	SAMPLE ID	SAMPLING TIME		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - Full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	GAC-1 - 20201001	10-1	0813	Water	2		2		X			
	GAC-2 - 20201001		0816	Water	1				X			
	GAC-3 - 20201001		0819	Water					X			
	GAC-4 - 20201001		0822	Water					X			
	IX-1 - 20201001		0825	Water					X			
	IX-2 - 20201001		0828	Water					X			
	IX-3 - 20201001		0831	Water					X			
	IX-4 - 20201001		0834	Water					X			
	LH-INF-R			Water					X	X		
	LH-INF-DUP			Water					X	X		
	GAC-5 - 20201001	10-1	1013	Water	2		2		X			
	GAC-6 - 20201001		1016	Water	1				X			
	GAC-7 - 20201001		1019	Water					X			
	GAC-8 - 20201001		1022	Water					X			

Requested by: (Signature) *Miae Jeon* Date: 10-1-2020 Time: 1152

Relinquished by: (Signature) *Miae Jeon* Date: 10-1-2020 Time: 1152

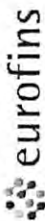
Received by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_







Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 895705

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 649A (Observation = 20.4 °C) (Corr. Factor = -0.2 °C) (Final = 20.2 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) **Chemistry:** >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) **Microbiology, Distribution:** < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) **Microbiology, Surface Water:** < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) **VOA and Radon Headspace:**

No Samples with Headspace:

Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/≤6	>6mm	Samp ID	Bottle #	None/≤6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY:	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
<u>you</u>	<u>[Signature]</u>	<u>PAUL MAILLÉ</u>	Eurofins Eaton Analytical	<u>10-1-20</u>	<u>1152</u>

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 895705  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/01/2020 1152

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/05/2020 19:56	Perfluorohexanoic acid (PFHxA)	<b>202010010384 IX-1-20201001</b>	0.0024		ug/L	0.0020
10/05/2020 20:06	Perfluorohexanoic acid (PFHxA)	<b>202010010385 IX-2-20201001</b>	0.0039		ug/L	0.0020
10/05/2020 20:25	Perfluorohexanoic acid (PFHxA)	<b>202010010386 IX-3-20201001</b>	0.0040		ug/L	0.0020
10/05/2020 20:34	Perfluorohexanoic acid (PFHxA)	<b>202010010387 IX-4-20201001</b>	0.0038		ug/L	0.0020
10/05/2020 20:44	Perfluorobutanesulfonic acid (PFBS)	<b>202010010388 GAC-5-20201001</b>	0.0058		ug/L	0.0020
10/05/2020 20:44	Perfluorohexanoic acid (PFHxA)		0.0051		ug/L	0.0020
10/05/2020 20:44	Perfluorooctanoic acid (PFOA)		0.0036		ug/L	0.0020
10/05/2020 20:54	Perfluorobutanesulfonic acid (PFBS)	<b>202010010389 GAC-6-20201001</b>	0.0082		ug/L	0.0020
10/05/2020 20:54	Perfluorohexanoic acid (PFHxA)		0.0055		ug/L	0.0020
10/05/2020 21:03	Perfluorobutanesulfonic acid (PFBS)	<b>202010010390 GAC-7-20201001</b>	0.0082		ug/L	0.0020
10/05/2020 21:03	Perfluorohexanoic acid (PFHxA)		0.0057		ug/L	0.0020
10/07/2020 00:54	Perfluorohexanoic acid (PFHxA)	<b>202010010392 IX-5-20201001</b>	0.0034		ug/L	0.0020
10/07/2020 01:13	Perfluorohexanoic acid (PFHxA)	<b>202010010393 IX-6-20201001</b>	0.0054		ug/L	0.0020
10/07/2020 02:58	Perfluoroheptanoic acid (PFHpA)	<b>202010010394 IX-7-20201001</b>	0.0026		ug/L	0.0020
10/07/2020 02:58	Perfluorohexanoic acid (PFHxA)		0.0061		ug/L	0.0020
10/07/2020 03:08	Perfluorohexanoic acid (PFHxA)	<b>202010010395 IX-8-20201001</b>	0.0066		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20201001 (202010010380)</b>					<b>Sampled on 10/01/2020 0813</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	13C2-PFDA	113	%		1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	13C2-PFHxA	123	%		1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	108	%		1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	103	%		1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	112	%		1

<b>GAC-2-20201001 (202010010381)</b>					<b>Sampled on 10/01/2020 0816</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	13C2-PFDA	101	%		1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	13C2-PFHxA	110	%		1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	94	%		1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	101	%		1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	114	%		1

**GAC-3-20201001 (202010010382)**

**Sampled on 10/01/2020 0819**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	13C2-PFDA	108	%		1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	13C2-PFHxA	116	%		1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	102	%		1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	104	%		1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	109	%		1

**GAC-4-20201001 (202010010383)**

Sampled on 10/01/2020 0822

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.

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 1 800 566 LABS (1 800 566 5227)

Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	13C2-PFDA	99	%		1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	13C2-PFHxA	110	%		1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	114	%		1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	96	%		1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	101	%		1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	106	%		1

**IX-1-20201001 (202010010384)**

Static ID: 537.1

Sampled on 10/01/2020 0825

**EPA 537.1 - EPA Method 537.1**

10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	13C2-PFDA	112	%		1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	13C2-PFHxA	121	%		1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	106	%		1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	101	%		1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	114	%		1

**IX-2-20201001 (202010010385)**

**Sampled on 10/01/2020 0828**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	13C2-PFDA	119	%		1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	13C2-PFHxA	127	%		1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	115	%		1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	102	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	120	%		1
<b>IX-3-20201001 (202010010386)</b>					<b>Sampled on 10/01/2020 0831</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	13C2-PFDA	113	%		1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	13C2-PFHxA	118	%		1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	99	%		1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	113	%		1
<b>IX-4-20201001 (202010010387)</b>					<b>Sampled on 10/01/2020 0834</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	13C2-PFDA	103	%		1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	13C2-PFHxA	107	%		1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	96	%		1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	d5-NETFOSAA	115	%		1

**GAC-5-20201001 (202010010388)**

Sampled on 10/01/2020 1013

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0058	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0051	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0036	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	13C2-PFDA	101	%		1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	13C2-PFHxA	106	%		1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	93	%		1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	110	%		1

**GAC-6-20201001 (202010010389)**

Sampled on 10/01/2020 1016

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0082	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0055	ug/L	0.0020	1

Rounding on totals after summation.

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 1 800 566 LABS (1 800 566 5227)

Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	13C2-PFDA	112	%		1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	13C2-PFHxA	117	%		1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	103	%		1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	100	%		1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	117	%		1

**GAC-7-20201001 (202010010390)**

Sampled on 10/01/2020 1019

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0082	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0057	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	13C2-PFDA	100	%		1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	13C2-PFHxA	112	%		1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	99	%		1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	99	%		1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	113	%		1

**GAC-8-20201001 (202010010391)**

**Sampled on 10/01/2020 1022**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	13C2-PFDA	111	%		1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	13C2-PFHxA	120	%		1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	108	%		1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	100	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	115	%		1
<b>IX-5-20201001 (202010010392)</b>					<b>Sampled on 10/01/2020 1025</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	13C2-PFDA	92	%		1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	13C2-PFHxA	93	%		1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	13C3-HFPO-DA	85	%		1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	d3-NMeFOSAA	112	%		1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	d5-NEtFOSAA	91	%		1

<b>IX-6-20201001 (202010010393)</b>					<b>Sampled on 10/01/2020 1028</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0054	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	13C2-PFDA	86	%		1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	13C2-PFHxA	87	%		1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	13C3-HFPO-DA	80	%		1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	d3-NMeFOSAA	112	%		1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	d5-NETFOSAA	87	%		1

**IX-7-20201001 (202010010394)**

Static ID: 537.1

**Sampled on 10/01/2020 1031**

**EPA 537.1 - EPA Method 537.1**

10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0026	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0061	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	13C2-PFDA	100	%		1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	13C2-PFHxA	96	%		1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	13C3-HFPO-DA	88	%		1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	d3-NMeFOSAA	116	%		1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**IX-8-20201001 (202010010395)**

Sampled on 10/01/2020 1034

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0066	ug/L	0.0020	1

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 1 800 566 LABS (1 800 566 5227)

**Report:** 895705  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	13C2-PFDA	99	%		1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	13C2-PFHxA	102	%		1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	13C3-HFPO-DA	92	%		1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	d3-NMeFOSAA	115	%		1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	d5-NEtFOSAA	89	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 895705  
Project: 0250000  
Group: WRD Pilot [Set #2]

Water Replenishment District

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**EPA Method 537.1**

**Prep Batch: 1278564 Analytical Batch: 1279173**

**Analysis Date: 10/05/2020**

202010010380	GAC-1-20201001
202010010381	GAC-2-20201001
202010010382	GAC-3-20201001
202010010383	GAC-4-20201001
202010010384	IX-1-20201001
202010010385	IX-2-20201001
202010010386	IX-3-20201001
202010010387	IX-4-20201001
202010010388	GAC-5-20201001
202010010389	GAC-6-20201001
202010010390	GAC-7-20201001
202010010391	GAC-8-20201001

Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
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Analyzed by: SZZ

**EPA Method 537.1**

**Prep Batch: 1278831 Analytical Batch: 1279434**

**Analysis Date: 10/07/2020**

202010010392	IX-5-20201001
202010010393	IX-6-20201001
202010010394	IX-7-20201001
202010010395	IX-8-20201001

Analyzed by: SZZ  
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Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>EPA Method 537.1 by EPA 537.1</b>									
<b>Prep Batch: 1278564 Analytical Batch: 1279173</b>					<b>Analysis Date: 10/05/2020</b>				
DUP_202010010381	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0248	ug/L	105	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0255	ug/L	108	(70-130)	30	2.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00210	ug/L	111	(50-150)		
MS_202010010383	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00201	ug/L	107	(50-150)		
DUP_202010010381	13C2-PFDA (S)			94.4	%	94	(70-130)		
LCS1	13C2-PFDA (S)		100	118	%	118	(70-130)		
LCS2	13C2-PFDA (S)		100	115	%	115	(70-130)		
MBLK	13C2-PFDA (S)			105	%	105	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	116	%	116	(70-130)		
MS_202010010383	13C2-PFDA (S)		100	111	%	111	(70-130)		
DUP_202010010381	13C2-PFHxA (S)			102	%	102	(70-130)		
LCS1	13C2-PFHxA (S)		100	114	%	114	(70-130)		
LCS2	13C2-PFHxA (S)		100	114	%	115	(70-130)		
MBLK	13C2-PFHxA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	116	%	116	(70-130)		
MS_202010010383	13C2-PFHxA (S)		100	114	%	114	(70-130)		
DUP_202010010381	13C2-PFOA- IS#1 (I)			124	%	124	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			104	%	104	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS_202010010383	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
DUP_202010010381	13C3-HFPO-DA (S)			89.3	%	89	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	99.2	%	99	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
MBLK	13C3-HFPO-DA (S)			89.4	%	89	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	98.9	%	99	(70-130)		
MS_202010010383	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
DUP_202010010381	13C4-PFOS- IS#2 (I)			99.8	%	100	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	96.8	%	97	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			98.3	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	99.2	%	99	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202010010383	13C4-PFOS- IS#2 (I)		100	98.4	%	98	(50-150)		
DUP_202010010381	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0271	ug/L	115	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0298	ug/L	126	(70-130)	30	9.5
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00225	ug/L	119	(50-150)		
MS_202010010383	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00218	ug/L	115	(50-150)		
DUP_202010010381	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0263	ug/L	113	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0274	ug/L	118	(70-130)	30	4.1
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00221	ug/L	119	(50-150)		
MS_202010010383	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00217	ug/L	117	(50-150)		
DUP_202010010381	d3-NMeFOSAA (I)			103	%	103	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MBLK	d3-NMeFOSAA (I)			103	%	103	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MS_202010010383	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
DUP_202010010381	d5-NEtFOSAA (S)			113	%	113	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
MBLK	d5-NEtFOSAA (S)			99.2	%	99	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MS_202010010383	d5-NEtFOSAA (S)		100	114	%	115	(70-130)		
DUP_202010010381	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0236	ug/L	95	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0260	ug/L	104	(70-130)	30	9.3
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00208	ug/L	104	(50-150)		
MS_202010010383	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00202	ug/L	101	(50-150)		
DUP_202010010381	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0268	ug/L	107	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0288	ug/L	115	(70-130)	30	7.5
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00242	ug/L	121	(50-150)		
MS_202010010383	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00241	ug/L	120	(50-150)		
DUP_202010010381	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0260	ug/L	104	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0282	ug/L	113	(70-130)	30	8.1
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00240	ug/L	120	(50-150)		
MS_202010010383	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00227	ug/L	112	(50-150)		
DUP_202010010381	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0202	ug/L	91	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0217	ug/L	98	(70-130)	30	7.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00193	ug/L	109	(50-150)		
MS_202010010383	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00185	ug/L	104	(50-150)		
DUP_202010010381	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0290	ug/L	116	(70-130)	30	7.1
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00239	ug/L	120	(50-150)		
MS_202010010383	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00224	ug/L	111	(50-150)		
DUP_202010010381	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0264	ug/L	106	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0287	ug/L	115	(70-130)	30	8.3
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202010010383	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00210	ug/L	105	(50-150)		
DUP_202010010381	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0306	ug/L	122	(70-130)	30	7.8
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00251	ug/L	125	(50-150)		
MS_202010010383	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00233	ug/L	116	(50-150)		
DUP_202010010381	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0257	ug/L	113	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0269	ug/L	118	(70-130)	30	4.6
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00226	ug/L	124	(50-150)		
MS_202010010383	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00216	ug/L	118	(50-150)		
DUP_202010010381	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0264	ug/L	105	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0294	ug/L	118	(70-130)	30	11

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 895705  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00244	ug/L	122	(50-150)		
MS_202010010383	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00235	ug/L	115	(50-150)		
DUP_202010010381	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0293	ug/L	117	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0318	ug/L	127	(70-130)	30	8.2
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00258	ug/L	129	(50-150)		
MS_202010010383	Perfluorononanoic acid (PFNA)	ND	0.002	0.00245	ug/L	119	(50-150)		
DUP_202010010381	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0248	ug/L	107	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0272	ug/L	118	(70-130)	30	9.2
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00229	ug/L	124	(50-150)		
MS_202010010383	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00216	ug/L	112	(50-150)		
DUP_202010010381	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0291	ug/L	117	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0310	ug/L	124	(70-130)	30	6.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00272	ug/L	136	(50-150)		
MS_202010010383	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00263	ug/L	126	(50-150)		
DUP_202010010381	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0300	ug/L	120	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0312	ug/L	125	(70-130)	30	4.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00245	ug/L	122	(50-150)		
MS_202010010383	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00225	ug/L	106	(50-150)		
DUP_202010010381	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0281	ug/L	112	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0304	ug/L	122	(70-130)	30	7.9
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00237	ug/L	118	(50-150)		
MS_202010010383	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00220	ug/L	110	(50-150)		
DUP_202010010381	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0275	ug/L	110	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0288	ug/L	115	(70-130)	30	4.6
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00231	ug/L	116	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202010010383	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00214	ug/L	106	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1278831 Analytical Batch: 1279434

Analysis Date: 10/07/2020

DUP_202010010393	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0231	ug/L	98	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0243	ug/L	103	(70-130)	30	5.1
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00200	ug/L	106	(50-150)		
MS2_202010010392	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0461	ug/L	98	(70-130)		
DUP_202010010393	13C2-PFDA (S)			93.6	%	94	(70-130)		
LCS1	13C2-PFDA (S)		100	96.2	%	96	(70-130)		
LCS2	13C2-PFDA (S)		100	93.2	%	93	(70-130)		
MBLK	13C2-PFDA (S)			95.5	%	95	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	95.4	%	95	(70-130)		
MS2_202010010392	13C2-PFDA (S)		100	96.2	%	96	(70-130)		
DUP_202010010393	13C2-PFHxA (S)			95.6	%	96	(70-130)		
LCS1	13C2-PFHxA (S)		100	103	%	103	(70-130)		
LCS2	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MBLK	13C2-PFHxA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MS2_202010010392	13C2-PFHxA (S)		100	97.2	%	97	(70-130)		
DUP_202010010393	13C2-PFOA- IS#1 (I)			104	%	104	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	94.9	%	95	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	97.4	%	97	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			95.1	%	95	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	97.7	%	98	(50-150)		
MS2_202010010392	13C2-PFOA- IS#1 (I)		100	97.4	%	97	(50-150)		
DUP_202010010393	13C3-HFPO-DA (S)			88.1	%	88	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	92.5	%	93	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	91.1	%	91	(70-130)		
MBLK	13C3-HFPO-DA (S)			91.5	%	91	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	90.0	%	90	(70-130)		
MS2_202010010392	13C3-HFPO-DA (S)		100	89.2	%	89	(70-130)		
DUP_202010010393	13C4-PFOS- IS#2 (I)			103	%	103	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			99.6	%	100	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MS2_202010010392	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
DUP_202010010393	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0278	ug/L	118	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0276	ug/L	117	(70-130)	30	1.1
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00237	ug/L	126	(50-150)		
MS2_202010010392	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0529	ug/L	109	(70-130)		
DUP_202010010393	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0252	ug/L	108	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0264	ug/L	113	(70-130)	30	4.7
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00219	ug/L	118	(50-150)		
MS2_202010010392	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0508	ug/L	109	(70-130)		
DUP_202010010393	d3-NMeFOSAA (I)			108	%	108	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MBLK	d3-NMeFOSAA (I)			102	%	102	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MS2_202010010392	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
DUP_202010010393	d5-NEtFOSAA (S)			91.6	%	92	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	90.4	%	90	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	90.9	%	91	(70-130)		
MBLK	d5-NEtFOSAA (S)			88.7	%	89	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	91.6	%	92	(70-130)		
MS2_202010010392	d5-NEtFOSAA (S)		100	87.9	%	88	(70-130)		
DUP_202010010393	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0273	ug/L	109	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0277	ug/L	111	(70-130)	30	1.5
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00237	ug/L	118	(50-150)		
MS2_202010010392	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0555	ug/L	111	(70-130)		
DUP_202010010393	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0272	ug/L	109	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0282	ug/L	113	(70-130)	30	3.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00242	ug/L	121	(50-150)		
MS2_202010010392	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0544	ug/L	109	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202010010393	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0266	ug/L	106	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0282	ug/L	113	(70-130)	30	5.8
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00232	ug/L	116	(50-150)		
MS2_202010010392	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0547	ug/L	109	(70-130)		
DUP_202010010393	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0238	ug/L	108	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0251	ug/L	113	(70-130)	30	5.3
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00217	ug/L	123	(50-150)		
MS2_202010010392	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0482	ug/L	108	(70-130)		
DUP_202010010393	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0284	ug/L	113	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0292	ug/L	117	(70-130)	30	2.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00249	ug/L	124	(50-150)		
MS2_202010010392	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0588	ug/L	118	(70-130)		
DUP_202010010393	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0280	ug/L	112	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0293	ug/L	117	(70-130)	30	4.5
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00247	ug/L	124	(50-150)		
MS2_202010010392	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0562	ug/L	112	(70-130)		
DUP_202010010393	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0288	ug/L	115	(70-130)	30	2.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00250	ug/L	125	(50-150)		
MS2_202010010392	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0549	ug/L	108	(70-130)		
DUP_202010010393	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0245	ug/L	107	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0258	ug/L	113	(70-130)	30	5.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00220	ug/L	121	(50-150)		
MS2_202010010392	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0492	ug/L	108	(70-130)		
DUP_202010010393	Perfluorohexanoic acid (PFHxA)	0.0054		0.00588	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0303	ug/L	121	(70-130)		

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 895705  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0303	ug/L	121	(70-130)	30	0.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00262	ug/L	131	(50-150)		
MS2_202010010392	Perfluorohexanoic acid (PFHxA)	0.0034	0.05	0.0608	ug/L	115	(70-130)		
DUP_202010010393	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0300	ug/L	120	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0303	ug/L	121	(70-130)	30	1
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00275	ug/L	138	(50-150)		
MS2_202010010392	Perfluorononanoic acid (PFNA)	ND	0.05	0.0620	ug/L	124	(70-130)		
DUP_202010010393	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0253	ug/L	109	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0265	ug/L	115	(70-130)	30	4.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00230	ug/L	124	(50-150)		
MS2_202010010392	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0510	ug/L	110	(70-130)		
DUP_202010010393	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0299	ug/L	120	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0305	ug/L	122	(70-130)	30	2.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00269	ug/L	135	(50-150)		
MS2_202010010392	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0608	ug/L	119	(70-130)		
DUP_202010010393	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0263	ug/L	105	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0280	ug/L	112	(70-130)	30	6.3
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00236	ug/L	118	(50-150)		
MS2_202010010392	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0539	ug/L	107	(70-130)		
DUP_202010010393	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0311	ug/L	125	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0315	ug/L	126	(70-130)	30	1.3
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00268	ug/L	134	(50-150)		
MS2_202010010392	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0606	ug/L	121	(70-130)		
DUP_202010010393	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0271	ug/L	108	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0280	ug/L	112	(70-130)	30	3.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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(I) - Indicates internal standard compound.

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**Report:** 895705  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00241	ug/L	120	(50-150)		
MS2_202010010392	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0544	ug/L	109	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 10/07/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 10/07/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 10/07/2020

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn:

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:

Colilert Report - Page 1 of 1



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Total Coliform Large, E. Coli Small, E. Coli Large), MPN/100 mL (Total Coliform, E. Coli), Presence/Absence (P/A)\* (Total Coliform, E. Coli)

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 10/07/2020

Quant Report - Page 1 of 1

, Tel Fax



750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 897233  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

### STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 897233  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **October 08, 2020 at 1249**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202010080580</u>	GAC-1-20201008 Static ID: 537.1 @537.1	10/08/2020 0933
<u>202010080581</u>	GAC-2-20201008 Static ID: 537.1 @537.1	10/08/2020 0936
<u>202010080582</u>	GAC-3-20201008 Static ID: 537.1 @537.1	10/08/2020 0939
<u>202010080583</u>	GAC-4-20201008 Static ID: 537.1 @537.1	10/08/2020 0942
<u>202010080584</u>	IX-1-20201008 Static ID: 537.1 @537.1	10/08/2020 0945
<u>202010080585</u>	IX-2-20201008 Static ID: 537.1 @537.1	10/08/2020 0948
<u>202010080586</u>	IX-3-20201008 Static ID: 537.1 @537.1	10/08/2020 0951
<u>202010080587</u>	IX-4-20201008 Static ID: 537.1 @537.1	10/08/2020 0954
<u>202010080588</u>	GAC-5-20201008 @537.1	10/08/2020 1133
<u>202010080589</u>	GAC-6-20201008 @537.1	10/08/2020 1136
<u>202010080590</u>	GAC-7-20201008 @537.1	10/08/2020 1139
<u>202010080591</u>	GAC-8-20201008	10/08/2020 1142

**Acknowledgement of Samples Received**

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 897233  
Project: 0250000  
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

The following samples were received from you on **October 08, 2020** at **1249**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
<u>202010080592</u>	IX-5-20201008	10/08/2020 1145
	@537.1	
<u>202010080593</u>	IX-6-20201008	10/08/2020 1148
	@537.1	
<u>202010080594</u>	IX-7-20201008	10/08/2020 1151
	@537.1	
<u>202010080595</u>	IX-8-20201008	10/08/2020 1154
	@537.1	

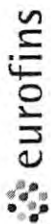
**Test Description**

@537.1 -- EPA Method 537.1

897733

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302									
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang									
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S) (PRINT) RDT									
LABORATORY: Eurofins Eaton Analytical		<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.											
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD													
SPECIAL INSTRUCTIONS: Send report copies to pegaivin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results													
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	
		DATE	TIME										
	GAC-1-20201008	10-8	0933	Water	2				X				
	GAC-2-20201008		0936	Water	2				X				
	GAC-3-20201008		0939	Water	2				X				
	GAC-4-20201008		0942	Water	2				X				
	IX-1-20201008		0945	Water	2				X				
	IX-2-20201008		0948	Water	2				X				
	IX-3-20201008		0951	Water	2				X				
	IX-4-20201008		0954	Water	2				X				
	EH-INF			Water					X	X	X		
	EH-INF-DUP			Water					X	X	X		
	GAC-5-20201008	10-8	1133	Water	2				X				
	GAC-6-20201008		1136	Water	2				X				
	GAC-7-20201008		1139	Water	2				X				
	GAC-8-20201008		1142	Water	2				X				
Relinquished by: (Signature) <i>[Signature]</i>		Date: 10-8-2020		Time: 12:48		Received by: (Signature) <i>[Signature]</i>		Date: 10/8/20		Time: 12:49		Received by: (Signature) <i>[Signature]</i>	
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Date:		Time:		Received by: (Signature)	

<b>FROM:</b> GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com LABORATORY: Eurofins Eaton Analytical		<b>PROJECT NAME:</b> WRD Pilot <b>PROJECT CONTACT:</b> Miae Jeon <b>GLOBAL ID:</b>		<b>PROJECT NO.:</b> 5302 <b>LAB CONTACT:</b> Sophia Liang <b>SAMPLER(S): (PRINT)</b> RDT								
<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.												
LAB USE ONLY	SAMPLE ID	TIME SAMPLING DATE TIME		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	IX-5-20201008	1145	10-8	Water	2				X			
	IX-6-20201008	1148	↓	Water	2				X			
	IX-7-20201008	1151	↓	Water	2				X			
	IX-8-20201008	1154	↓	Water	2				X			
	MB-INF			Water					X			
	MB-INF-DUP			Water					X			
	FB			Water					X			
Relinquished by: (Signature) <u>Miae Jeon</u>						Received by: (Signature) <u>Miae Jeon</u>	Date: 10-8-2020	Time: 1248				
Relinquished by: (Signature)						Received by: (Signature)	Date: 10/8/20	Time: 12:49				
Relinquished by: (Signature)						Received by: (Signature)	Date:	Time:				



Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

SPMS

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know, ASMs will determine whether to proceed with analysis or not.

### SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 618A (Observation = 0.8 °C) (Corr. Factor = 0.2 °C) (Final = 12.6 °C)

TYPE OF ICE: Real ✓ Synthetic \_\_\_\_\_ No Ice \_\_\_\_\_ Frozen ✓ Partially Frozen \_\_\_\_\_ Thawed \_\_\_\_\_ N/A \_\_\_\_\_

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

7) VOA and Radon Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

### Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
	<u>W</u>	Eurofins Eaton Analytical	<u>10/8/20</u>	<u>12:49</u>



Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 897233  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/08/2020 1249

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202010080584</b>				
		<b><u>IX-1-20201008</u></b>				
10/13/2020 00:12	Perfluorohexanoic acid (PFHxA)		0.0024		ug/L	0.0020
		<b>202010080585</b>				
		<b><u>IX-2-20201008</u></b>				
10/13/2020 00:21	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
		<b>202010080586</b>				
		<b><u>IX-3-20201008</u></b>				
10/13/2020 00:31	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
		<b>202010080587</b>				
		<b><u>IX-4-20201008</u></b>				
10/13/2020 14:14	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
		<b>202010080588</b>				
		<b><u>GAC-5-20201008</u></b>				
10/13/2020 00:50	Perfluorobutanesulfonic acid (PFBS)		0.0060		ug/L	0.0020
10/13/2020 00:50	Perfluoroheptanoic acid (PFHpA)		0.0020		ug/L	0.0020
10/13/2020 00:50	Perfluorohexanoic acid (PFHxA)		0.0057		ug/L	0.0020
10/13/2020 00:50	Perfluorooctanoic acid (PFOA)		0.0039		ug/L	0.0020
		<b>202010080589</b>				
		<b><u>GAC-6-20201008</u></b>				
10/13/2020 01:00	Perfluorobutanesulfonic acid (PFBS)		0.010		ug/L	0.0020
10/13/2020 01:00	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020
		<b>202010080590</b>				
		<b><u>GAC-7-20201008</u></b>				
10/13/2020 01:20	Perfluorobutanesulfonic acid (PFBS)		0.0084		ug/L	0.0020
10/13/2020 01:20	Perfluorohexanoic acid (PFHxA)		0.0064		ug/L	0.0020
		<b>202010080591</b>				
		<b><u>GAC-8-20201008</u></b>				
10/13/2020 01:31	Perfluorohexanoic acid (PFHxA)		0.0021		ug/L	0.0020
		<b>202010080592</b>				
		<b><u>IX-5-20201008</u></b>				
10/13/2020 01:41	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
		<b>202010080593</b>				
		<b><u>IX-6-20201008</u></b>				
10/13/2020 22:59	Perfluorohexanoic acid (PFHxA)		0.0063		ug/L	0.0020
		<b>202010080594</b>				
		<b><u>IX-7-20201008</u></b>				
10/13/2020 23:18	Perfluoroheptanoic acid (PFHpA)		0.0033		ug/L	0.0020
10/13/2020 23:18	Perfluorohexanoic acid (PFHxA)		0.0066		ug/L	0.0020
		<b>202010080595</b>				
		<b><u>IX-8-20201008</u></b>				
10/14/2020 02:11	Perfluorohexanoic acid (PFHxA)		0.0064		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20201008 (202010080580)</b>					<b>Sampled on 10/08/2020 0933</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	13C2-PFDA	114	%		1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	13C2-PFHxA	116	%		1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	13C3-HFPO-DA	109	%		1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	d3-NMeFOSAA	97	%		1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	d5-NEtFOSAA	108	%		1

<b>GAC-2-20201008 (202010080581)</b>					<b>Sampled on 10/08/2020 0936</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	13C2-PFDA	116	%		1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	13C2-PFHxA	120	%		1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	116	%		1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	113	%		1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**GAC-3-20201008 (202010080582)**

Sampled on 10/08/2020 0939

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	13C2-PFDA	122	%		1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	13C2-PFHxA	127	%		1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	122	%		1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	115	%		1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	112	%		1

**GAC-4-20201008 (202010080583)**

Sampled on 10/08/2020 0942

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	13C2-PFDA	120	%		1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	13C2-PFHxA	122	%		1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	119	%		1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	114	%		1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**IX-1-20201008 (202010080584)**

Static ID: 537.1

**Sampled on 10/08/2020 0945**

**EPA 537.1 - EPA Method 537.1**

10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.

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Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	13C2-PFDA	123	%		1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	13C2-PFHxA	128	%		1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	122	%		1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	114	%		1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	113	%		1

**IX-2-20201008 (202010080585)**

**Sampled on 10/08/2020 0948**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	13C2-PFDA	122	%		1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	13C2-PFHxA	128	%		1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	122	%		1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	114	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	110	%		1
<b>IX-3-20201008 (202010080586)</b>						<b>Sampled on 10/08/2020 0951</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	13C2-PFDA	120	%		1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	13C2-PFHxA	128	%		1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	123	%		1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	114	%		1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	109	%		1

<b>IX-4-20201008 (202010080587)</b>						<b>Sampled on 10/08/2020 0954</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	13C2-PFDA	111	%		1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	13C2-PFHxA	115	%		1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	13C3-HFPO-DA	110	%		1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	d3-NMeFOSAA	100	%		1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	d5-NETFOSAA	101	%		1

**GAC-5-20201008 (202010080588)**

Sampled on 10/08/2020 1133

**EPA 537.1 - EPA Method 537.1**

10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

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Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0060	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0020	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0057	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0039	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	13C2-PFDA	120	%		1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	13C2-PFHxA	118	%		1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	116	%		1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	113	%		1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	111	%		1

**GAC-6-20201008 (202010080589)**

**Sampled on 10/08/2020 1136**

**EPA 537.1 - EPA Method 537.1**

10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 897233  
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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	13C2-PFDA	121	%		1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	13C2-PFHxA	119	%		1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	119	%		1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	112	%		1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	106	%		1

**GAC-7-20201008 (202010080590)**

Sampled on 10/08/2020 1139

**EPA 537.1 - EPA Method 537.1**

10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0084	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	13C2-PFDA	126	%		1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	13C2-PFHxA	125	%		1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	120	%		1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	109	%		1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	112	%		1

**GAC-8-20201008 (202010080591)**

**Sampled on 10/08/2020 1142**

**EPA 537.1 - EPA Method 537.1**

10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0021	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	13C2-PFDA	125	%		1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	13C2-PFHxA	126	%		1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	122	%		1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	111	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	114	%		1
<b>IX-5-20201008 (202010080592)</b>					<b>Sampled on 10/08/2020 1145</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	13C2-PFDA	126	%		1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	13C2-PFHxA	128	%		1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	125	%		1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	112	%		1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	112	%		1

<b>IX-6-20201008 (202010080593)</b>					<b>Sampled on 10/08/2020 1148</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	13C2-PFDA	111	%		1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	13C2-PFHxA	115	%		1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	13C3-HFPO-DA	110	%		1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	d3-NMeFOSAA	101	%		1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**IX-7-20201008 (202010080594)**

Sampled on 10/08/2020 1151

**EPA 537.1 - EPA Method 537.1**

10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0066	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	13C2-PFDA	110	%		1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	13C2-PFHxA	116	%		1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	13C3-HFPO-DA	113	%		1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**IX-8-20201008 (202010080595)**

Sampled on 10/08/2020 1154

**EPA 537.1 - EPA Method 537.1**

10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

**Report:** 897233  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	13C2-PFDA	104	%		1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	13C2-PFHxA	106	%		1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	13C3-HFPO-DA	102	%		1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	d3-NMeFOSAA	102	%		1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	d5-NEtFOSAA	99	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



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**Report:** 897233  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

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**EPA Method 537.1**

**Prep Batch: 1280374 Analytical Batch: 1281011**

202010080581	GAC-2-20201008
202010080582	GAC-3-20201008
202010080583	GAC-4-20201008
202010080584	IX-1-20201008
202010080585	IX-2-20201008
202010080586	IX-3-20201008
202010080588	GAC-5-20201008
202010080589	GAC-6-20201008
202010080590	GAC-7-20201008
202010080591	GAC-8-20201008
202010080592	IX-5-20201008

**Analysis Date: 10/12/2020**

Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM

**EPA Method 537.1**

**Prep Batch: 1280374 Analytical Batch: 1281116**

202010080580	GAC-1-20201008
202010080587	IX-4-20201008

**Analysis Date: 10/13/2020**

Analyzed by: KAM  
Analyzed by: KAM

**EPA Method 537.1**

**Prep Batch: 1280556 Analytical Batch: 1281194**

202010080593	IX-6-20201008
202010080594	IX-7-20201008
202010080595	IX-8-20201008

**Analysis Date: 10/13/2020**

Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM

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Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>EPA Method 537.1 by EPA 537.1</b>									
<b>Prep Batch: 1280374 Analytical Batch: 1281011</b>					<b>Analysis Date: 10/12/2020</b>				
DUP_202010080582	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.02355	0.0258	ug/L				
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00205	ug/L	109	(50-150)		
MS1_202010080581	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0245	ug/L	104	(70-130)		
DUP_202010080582	13C2-PFDA (S)			120	%	120	(70-130)		
LCS2	13C2-PFDA (S)		100	130	%	130	(70-130)		
MBLK	13C2-PFDA (S)			124	%	124	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	121	%	121	(70-130)		
MS1_202010080581	13C2-PFDA (S)		100	121	%	121	(70-130)		
DUP_202010080582	13C2-PFHxA (S)			123	%	123	(70-130)		
LCS2	13C2-PFHxA (S)		100	130	%	130	(70-130)		
MBLK	13C2-PFHxA (S)			127	%	127	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	121	%	121	(70-130)		
MS1_202010080581	13C2-PFHxA (S)		100	127	%	127	(70-130)		
DUP_202010080582	13C2-PFOA- IS#1 (I)			98.4	%	98	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	98.2	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			99.1	%	99	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	97.8	%	98	(50-150)		
MS1_202010080581	13C2-PFOA- IS#1 (I)		100	99.5	%	100	(50-150)		
DUP_202010080582	13C3-HFPO-DA (S)			118	%	118	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	128	%	128	(70-130)		
MBLK	13C3-HFPO-DA (S)			120	%	121	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	117	%	117	(70-130)		
MS1_202010080581	13C3-HFPO-DA (S)		100	120	%	120	(70-130)		
DUP_202010080582	13C4-PFOS- IS#2 (I)			99.4	%	99	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	97.3	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			99.8	%	100	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	97.2	%	97	(50-150)		
MS1_202010080581	13C4-PFOS- IS#2 (I)		100	98.8	%	99	(50-150)		
DUP_202010080582	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.023625	0.0280	ug/L				
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00236	ug/L	125	(50-150)		
MS1_202010080581	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0269	ug/L	114	(70-130)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202010080582	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0233	0.0266	ug/L				
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00217	ug/L	117	(50-150)		
MS1_202010080581	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0259	ug/L	111	(70-130)		
DUP_202010080582	d3-NMeFOSAA (I)			114	%	114	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	115	%	115	(50-150)		
MBLK	d3-NMeFOSAA (I)			109	%	109	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
MS1_202010080581	d3-NMeFOSAA (I)		100	113	%	113	(50-150)		
DUP_202010080582	d5-NEtFOSAA (S)			113	%	113	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	116	%	116	(70-130)		
MBLK	d5-NEtFOSAA (S)			110	%	110	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
MS1_202010080581	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
DUP_202010080582	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0282	ug/L				
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00242	ug/L	121	(50-150)		
MS1_202010080581	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0275	ug/L	110	(70-130)		
DUP_202010080582	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0263	ug/L				
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	108	(50-150)		
MS1_202010080581	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0261	ug/L	105	(70-130)		
DUP_202010080582	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0273	ug/L				
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00224	ug/L	112	(50-150)		
MS1_202010080581	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0268	ug/L	107	(70-130)		
DUP_202010080582	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.02213	0.0250	ug/L				
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00208	ug/L	118	(50-150)		
MS1_202010080581	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0248	ug/L	112	(70-130)		
DUP_202010080582	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0290	ug/L				
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00246	ug/L	123	(50-150)		
MS1_202010080581	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0286	ug/L	115	(70-130)		
DUP_202010080582	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0292	ug/L				
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00239	ug/L	119	(50-150)		
MS1_202010080581	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0274	ug/L	110	(70-130)		
DUP_202010080582	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0300	ug/L				
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00250	ug/L	125	(50-150)		
MS1_202010080581	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0287	ug/L	115	(70-130)		
DUP_202010080582	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.0228	0.0260	ug/L				
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00215	ug/L	118	(50-150)		
MS1_202010080581	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0256	ug/L	112	(70-130)		
DUP_202010080582	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0287	ug/L				
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00248	ug/L	124	(50-150)		
MS1_202010080581	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0282	ug/L	113	(70-130)		
DUP_202010080582	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0292	ug/L				
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00246	ug/L	123	(50-150)		
MS1_202010080581	Perfluorononanoic acid (PFNA)	ND	0.025	0.0284	ug/L	114	(70-130)		
DUP_202010080582	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.02314	0.0258	ug/L				
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00222	ug/L	120	(50-150)		
MS1_202010080581	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0247	ug/L	107	(70-130)		
DUP_202010080582	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0295	ug/L				
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00257	ug/L	129	(50-150)		
MS1_202010080581	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0292	ug/L	116	(70-130)		
DUP_202010080582	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0305	ug/L				
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00275	ug/L	137	(50-150)		
MS1_202010080581	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0291	ug/L	115	(70-130)		
DUP_202010080582	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0295	ug/L				
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00243	ug/L	122	(50-150)		
MS1_202010080581	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0280	ug/L	112	(70-130)		
DUP_202010080582	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0289	ug/L				
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00238	ug/L	119	(50-150)		
MS1_202010080581	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0277	ug/L	111	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1280374 Analytical Batch: 1281116

Analysis Date: 10/13/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0236	ug/L	100	(70-130)		
LCS1	13C2-PFDA (S)		100	110	%	110	(70-130)		
LCS1	13C2-PFHxA (S)		100	115	%	115	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	97.0	%	97	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	110	%	110	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	96.3	%	96	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0254	ug/L	108	(70-130)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0241	ug/L	104	(70-130)		
LCS1	d3-NMeFOSAA (I)		100	96.4	%	96	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0259	ug/L	103	(70-130)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0243	ug/L	97	(70-130)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0245	ug/L	98	(70-130)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0235	ug/L	106	(70-130)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0271	ug/L	109	(70-130)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0253	ug/L	101	(70-130)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0281	ug/L	112	(70-130)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0243	ug/L	107	(70-130)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0262	ug/L	105	(70-130)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0273	ug/L	109	(70-130)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0233	ug/L	101	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0275	ug/L	110	(70-130)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0271	ug/L	108	(70-130)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0255	ug/L	102	(70-130)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0260	ug/L	104	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1280556 Analytical Batch: 1281194

Analysis Date: 10/13/2020

DUP_202010080594	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0483	ug/L	103	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0481	ug/L	102	(70-130)	30	0.42
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00187	ug/L	100	(50-150)		
MS_202010080593	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00187	ug/L	100	(50-150)		
DUP_202010080594	13C2-PFDA (S)			111	%	111	(70-130)		
LCS3	13C2-PFDA (S)		100	109	%	109	(70-130)		
LCS4	13C2-PFDA (S)		100	108	%	108	(70-130)		
MBLK	13C2-PFDA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	107	%	107	(70-130)		
MS_202010080593	13C2-PFDA (S)		100	108	%	108	(70-130)		
DUP_202010080594	13C2-PFHxA (S)			113	%	113	(70-130)		
LCS3	13C2-PFHxA (S)		100	114	%	114	(70-130)		
LCS4	13C2-PFHxA (S)		100	110	%	110	(70-130)		
MBLK	13C2-PFHxA (S)			113	%	113	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	108	%	109	(70-130)		
MS_202010080593	13C2-PFHxA (S)		100	109	%	109	(70-130)		
DUP_202010080594	13C2-PFOA- IS#1 (I)			96.4	%	96	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	94.8	%	95	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	94.8	%	95	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			94.4	%	94	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	95.2	%	95	(50-150)		
MS_202010080593	13C2-PFOA- IS#1 (I)		100	97.8	%	98	(50-150)		
DUP_202010080594	13C3-HFPO-DA (S)			110	%	110	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
MBLK	13C3-HFPO-DA (S)			110	%	110	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
MS_202010080593	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
DUP_202010080594	13C4-PFOS- IS#2 (I)			98.9	%	99	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.8	%	99	(50-150)		
MS_202010080593	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
DUP_202010080594	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0538	ug/L	111	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0531	ug/L	109	(70-130)	30	1.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00204	ug/L	108	(50-150)		
MS_202010080593	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00214	ug/L	113	(50-150)		
DUP_202010080594	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0498	ug/L	107	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0487	ug/L	104	(70-130)	30	2.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00196	ug/L	105	(50-150)		
MS_202010080593	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00200	ug/L	108	(50-150)		
DUP_202010080594	d3-NMeFOSAA (I)			100	%	100	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	99.8	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			103	%	103	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	99.0	%	99	(50-150)		
MS_202010080593	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
DUP_202010080594	d5-NEtFOSAA (S)			98.6	%	99	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	91.8	%	92	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	94.3	%	94	(70-130)		
MBLK	d5-NEtFOSAA (S)			96.4	%	96	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	95.3	%	95	(70-130)		
MS_202010080593	d5-NEtFOSAA (S)		100	96.5	%	97	(70-130)		
DUP_202010080594	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0554	ug/L	111	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0555	ug/L	111	(70-130)	30	0.18
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00217	ug/L	108	(50-150)		
MS_202010080593	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00213	ug/L	106	(50-150)		
DUP_202010080594	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0503	ug/L	101	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0513	ug/L	103	(70-130)	30	2.0

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00204	ug/L	102	(50-150)		
MS_202010080593	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00206	ug/L	103	(50-150)		
DUP_202010080594	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0513	ug/L	103	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0517	ug/L	103	(70-130)	30	0.78
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00208	ug/L	104	(50-150)		
MS_202010080593	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00210	ug/L	105	(50-150)		
DUP_202010080594	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0481	ug/L	109	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0475	ug/L	107	(70-130)	30	1.3
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00190	ug/L	107	(50-150)		
MS_202010080593	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00202	ug/L	114	(50-150)		
DUP_202010080594	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0573	ug/L	115	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0563	ug/L	113	(70-130)	30	1.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00226	ug/L	113	(50-150)		
MS_202010080593	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00217	ug/L	109	(50-150)		
DUP_202010080594	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0554	ug/L	111	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0533	ug/L	107	(70-130)	30	3.9
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202010080593	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00206	ug/L	103	(50-150)		
DUP_202010080594	Perfluoroheptanoic acid (PFHpA)	0.0033		0.00334	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0580	ug/L	116	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0573	ug/L	115	(70-130)	30	1.2
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00233	ug/L	117	(50-150)		
MS_202010080593	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00363	ug/L	115	(50-150)		
DUP_202010080594	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0503	ug/L	110	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0504	ug/L	111	(70-130)	30	0.20
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00203	ug/L	111	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 897233  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202010080593	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00202	ug/L	110	(50-150)		
DUP_202010080594	Perfluorohexanoic acid (PFHxA)	0.0066		0.00659	ug/L		(0-30)	30	0.48
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0591	ug/L	118	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0566	ug/L	113	(70-130)	30	4.3
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202010080593	Perfluorohexanoic acid (PFHxA)	0.0063	0.002	0.00843	ug/L	106	(50-150)		
DUP_202010080594	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0572	ug/L	114	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0561	ug/L	112	(70-130)	30	1.9
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00231	ug/L	115	(50-150)		
MS_202010080593	Perfluorononanoic acid (PFNA)	ND	0.002	0.00237	ug/L	118	(50-150)		
DUP_202010080594	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0496	ug/L	107	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0487	ug/L	105	(70-130)	30	1.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00207	ug/L	112	(50-150)		
MS_202010080593	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00197	ug/L	102	(50-150)		
DUP_202010080594	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0582	ug/L	116	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0570	ug/L	114	(70-130)	30	2.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00235	ug/L	117	(50-150)		
MS_202010080593	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00278	ug/L	117	(50-150)		
DUP_202010080594	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0561	ug/L	112	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0550	ug/L	110	(70-130)	30	2.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00251	ug/L	125	(50-150)		
MS_202010080593	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00244	ug/L	108	(50-150)		
DUP_202010080594	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0551	ug/L	110	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0547	ug/L	109	(70-130)	30	0.73
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202010080593	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00213	ug/L	107	(50-150)		
DUP_202010080594	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

**Report:** 897233  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0561	ug/L	112	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0535	ug/L	107	(70-130)	30	4.7
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202010080593	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00212	ug/L	106	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 10/14/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 10/14/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 10/14/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for  
Presence or Absence, Quantification of Total Coliform and E. Coli  
By Quantitray**

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*	
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 10/14/2020

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 898631  
Project: 0250000  
Group: WRD Pilot [Set #1]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.



### STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 898631  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **October 15, 2020 at 1649**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202010150620</u>	GAC-1-20201015	10/15/2020 0900
	Static ID: SET A 537.1	
	@537.1	
<u>202010150621</u>	GAC-2-20201015	10/15/2020 0903
	@537.1	
<u>202010150622</u>	GAC-3-20201015	10/15/2020 0906
	@537.1	
<u>202010150623</u>	GAC-4-20201015	10/15/2020 0909
	@537.1	
<u>202010150624</u>	IX-1-20201015	10/15/2020 0912
	@537.1	
<u>202010150625</u>	IX-2-20201015	10/15/2020 0915
	@537.1	
<u>202010150626</u>	IX-3-20201015	10/15/2020 0918
	@537.1	
<u>202010150627</u>	IX-4-20201015	10/15/2020 0921
	@537.1	
<u>202010150628</u>	LH-INF-20201015	10/15/2020 0950
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS
	Chloride	Calcium Total ICAP
	Hexavalent chromium(Dissolved)	Iron Total ICAP
	Magnesium Total ICAP	Manganese Total ICAP/MS
	Oil and Grease by 1664(subbed)	Potassium Total ICAP
	Perchlorate	Sodium Total ICAP
	Sulfate	Total Dissolved Solid (TDS)
	Total Hardness as CaCO3 by ICP	Total Organic Carbon
	Total Suspended Solids (TSS)	Uranium by ICPMS as pCi/L
	Uranium ICAP/MS	
<u>202010150629</u>	GAC-5-20201015	10/15/2020 1525
	@537.1	
<u>202010150630</u>	GAC-6-20201015	10/15/2020 1528

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 898631  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **October 15, 2020 at 1649**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202010150631	GAC-7-20201015	10/15/2020 1531
	@537.1	
202010150632	GAC-8-20201015	10/15/2020 1534
	@537.1	
202010150633	IX-5M-20201015	10/15/2020 1601
	@537.1	
202010150634	IX-6M-20201015	10/15/2020 1604
	@537.1	
202010150635	IX-7M-20201015	10/15/2020 1607
	@537.1	
202010150636	IX-8M-20201015	10/15/2020 1610
	@537.1	
202010150695	GAC-1M-20201015 Static ID: 537.1	10/15/2020 0924
	@537.1	
202010150696	GAC-2M-20201015 Static ID: 537.1	10/15/2020 0927
	@537.1	
202010150697	GAC-3M-20201015 Static ID: 537.1	10/15/2020 0930
	@537.1	
202010150698	GAC-4M-20201015 Static ID: 537.1	10/15/2020 0933
	@537.1	
202010150699	IX-1M-20201015 Static ID: 537.1	10/15/2020 0936
	@537.1	
202010150700	IX-2M-20201015	10/15/2020 0939

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 898631  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **October 15, 2020 at 1649**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	Static ID: 537.1	
	@537.1	
<u>202010150701</u>	IX-3M-20201015	10/15/2020 0942
	Static ID: 537.1	
	@537.1	
<u>202010150702</u>	IX-4M-20201015	10/15/2020 0945
	Static ID: 537.1	
	@537.1	
<u>202010150703</u>	GAC-5M-20201015	10/15/2020 1549
	@537.1	
<u>202010150704</u>	GAC-6M-20201015	10/15/2020 1552
	@537.1	
<u>202010150705</u>	GAC-7M-20201015	10/15/2020 1555
	@537.1	
<u>202010150706</u>	GAC-8M-20201015	10/15/2020 1558
	@537.1	
<u>202010150707</u>	IX-5-20201015	10/15/2020 1537
	@537.1	
<u>202010150708</u>	IX-6-20201015	10/15/2020 1540
	@537.1	
<u>202010150709</u>	IX-7-20201015	10/15/2020 1543
	@537.1	
<u>202010150710</u>	IX-8-20201015	10/15/2020 1546
	@537.1	
<u>202010150711</u>	MB-INF-20201015	10/15/2020 1620

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 898631  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **October 15, 2020 at 1649**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@ICPMS Uranium by ICPMS as pCi/L	@537.1
	@ANIONS48 Alkalinity in CaCO3 units	Arsenic Total ICAP/MS
	Calcium Total ICAP Chloride	Hexavalent chromium(Dissolved)
	Iron Total ICAP Magnesium Total ICAP	Manganese Total ICAP/MS
	Oil and Grease by 1664(subbed) Perchlorate	Potassium Total ICAP
	Sodium Total ICAP Sulfate	Total Dissolved Solid (TDS)
	Total Hardness as CaCO3 by ICP Total Organic Carbon	Total Suspended Solids (TSS)

### Test Description

@ICPMS -- ICPMS Metals

@537.1 -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

@VOASDWA -- Volatile Organics by GCMS



898631

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302	
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang	
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) BC	
LABORATORY: Eurofins Eaton Analytical		<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.			
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 72 HR <input type="checkbox"/> 24 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> 48 HR		PFAS - full list (EPA 537.1) X Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) X Alkalinity (as CaCO3), (SM 2320B) X Uranium, Arsenic, Manganese (EPA 200.8), Perchlorate (EPA 314.0), Hexavalent Chromium (EPA 218.6), Fe, Na, K, Ca, Mg (EPA 200.7), Total Hardness as CaCO3 (SM 2340B), VOCs (EPA 524.2), TOC (SM 5310C), TDS (E160.1/SM 2540C), TSS (SM 2540D), Oil & Grease (EPA 1664)			
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results		Field Filtered Preserved Unpreserved			
LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.
	GAC-1-20201015	10/15/20	09:00	Water	2
	GAC-2-20201015		09:03	Water	
	GAC-3-20201015		09:06	Water	
	GAC-4-20201015		09:09	Water	
	IX-1-20201015		09:12	Water	
	IX-2-20201015		09:15	Water	
	IX-3-20201015		09:18	Water	
	IX-4-20201015		09:21	Water	
	LH-INF-20201015		09:50	Water	14
	LH-INF-DUP-BC			Water	
	GAC-5-20201015	10/15/20	15:25	Water	2
	GAC-6-20201015		15:28	Water	
	GAC-7-20201015		15:31	Water	
	GAC-8-20201015		15:39	Water	
Relinquished by: (Signature)		Received by: (Signature)		Date: 10/15/20	
Relinquished by: (Signature)		Received by: (Signature)		Date: 10/15/20	
Relinquished by: (Signature)		Received by: (Signature)		Date: 10/15/20	







Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 898631  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---

**Folder Comments**

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove, CAELAP 2944

**Flags Legend:**

Q2 - Sample received with head space.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202010150624 IX-1-20201015</b>				
10/19/2020 14:58	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
10/19/2020 14:58	Perfluorooctanoic acid (PFOA)		0.0028		ug/L	0.0020
		<b>202010150625 IX-2-20201015</b>				
10/19/2020 15:08	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
		<b>202010150626 IX-3-20201015</b>				
10/19/2020 15:17	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
		<b>202010150627 IX-4-20201015</b>				
10/19/2020 15:27	Perfluorohexanoic acid (PFHxA)		0.0044		ug/L	0.0020
		<b>202010150628 LH-INF-20201015</b>				
10/16/2020 21:36	Alkalinity in CaCO3 units		200		mg/L	2.0
10/17/2020 15:09	Arsenic Total ICAP/MS		2.8	10	ug/L	1.0
10/20/2020 13:06	Calcium Total ICAP		110		mg/L	1.0
10/15/2020 21:01	Chloride		110	250	mg/L	2.5
10/21/2020 15:56	Chloroform (Trichloromethane)		0.62		ug/L	0.50
10/23/2020 13:13	Hexavalent chromium(Dissolved)		0.65		ug/L	0.020
10/20/2020 13:06	Magnesium Total ICAP		21		mg/L	0.10
10/15/2020 21:01	Nitrate as Nitrogen by IC		3.0	10	mg/L	0.50
10/15/2020 21:01	Nitrate as NO3 (calc)		13	45	mg/L	2.2
10/19/2020 15:37	Perfluorobutanesulfonic acid (PFBS)		0.0067		ug/L	0.0020
10/19/2020 15:37	Perfluoroheptanoic acid (PFHpA)		0.0020		ug/L	0.0020
10/19/2020 15:37	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
10/19/2020 15:37	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
10/19/2020 15:37	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
10/19/2020 15:37	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
10/19/2020 15:37	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
10/20/2020 13:06	Potassium Total ICAP		4.7		mg/L	1.0
10/20/2020 13:06	Sodium Total ICAP		69		mg/L	1.0
10/15/2020 21:01	Sulfate		180	250	mg/L	2.5
10/19/2020 22:21	Total Dissolved Solids (TDS)		680	500	mg/L	10
10/20/2020 17:11	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
10/15/2020 21:01	Total Nitrate, Nitrite-N, CALC		3.0		mg/L	0.10
10/28/2020 06:58	Total Organic Carbon		0.81		mg/L	0.20
10/21/2020 15:56	Total THM		0.62	80	ug/L	0.50
10/17/2020 15:59	Uranium by ICPMS as pCi/L		3.7		pCi/L	0.70

**SUMMARY OF POSITIVE DATA ONLY**

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/17/2020 15:09	Uranium ICAP/MS		5.5	30	ug/L	1.0
	<b>202010150629</b>	<b><u>GAC-5-20201015</u></b>				
10/19/2020 15:56	Perfluorobutanesulfonic acid (PFBS)		0.0091		ug/L	0.0020
10/19/2020 15:56	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
10/19/2020 15:56	Perfluorohexanesulfonic acid (PFHxS)		0.0021		ug/L	0.0020
10/19/2020 15:56	Perfluorohexanoic acid (PFHxA)		0.0073		ug/L	0.0020
10/19/2020 15:56	Perfluorooctanesulfonic acid (PFOS)		0.0048		ug/L	0.0020
10/19/2020 15:56	Perfluorooctanoic acid (PFOA)		0.0076		ug/L	0.0020
	<b>202010150630</b>	<b><u>GAC-6-20201015</u></b>				
10/19/2020 16:05	Perfluorobutanesulfonic acid (PFBS)		0.014		ug/L	0.0020
10/19/2020 16:05	Perfluorohexanoic acid (PFHxA)		0.0092		ug/L	0.0020
	<b>202010150631</b>	<b><u>GAC-7-20201015</u></b>				
10/19/2020 16:15	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
10/19/2020 16:15	Perfluoroheptanoic acid (PFHpA)		0.0027		ug/L	0.0020
10/19/2020 16:15	Perfluorohexanoic acid (PFHxA)		0.0078		ug/L	0.0020
10/19/2020 16:15	Perfluorooctanoic acid (PFOA)		0.0034		ug/L	0.0020
	<b>202010150632</b>	<b><u>GAC-8-20201015</u></b>				
10/19/2020 16:24	Perfluorobutanesulfonic acid (PFBS)		0.0037		ug/L	0.0020
10/19/2020 16:24	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
	<b>202010150633</b>	<b><u>IX-5M-20201015</u></b>				
10/19/2020 16:34	Perfluorobutanesulfonic acid (PFBS)		0.0021		ug/L	0.0020
10/19/2020 16:34	Perfluoroheptanoic acid (PFHpA)		0.0036		ug/L	0.0020
10/19/2020 16:34	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
10/19/2020 16:34	Perfluorooctanesulfonic acid (PFOS)		0.0034		ug/L	0.0020
10/19/2020 16:34	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
	<b>202010150634</b>	<b><u>IX-6M-20201015</u></b>				
10/19/2020 16:43	Perfluorobutanesulfonic acid (PFBS)		0.0021		ug/L	0.0020
10/19/2020 16:43	Perfluoroheptanoic acid (PFHpA)		0.0036		ug/L	0.0020
10/19/2020 16:43	Perfluorohexanoic acid (PFHxA)		0.0059		ug/L	0.0020
10/19/2020 16:43	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
	<b>202010150635</b>	<b><u>IX-7M-20201015</u></b>				
10/19/2020 16:53	Perfluorobutanesulfonic acid (PFBS)		0.0043		ug/L	0.0020
10/19/2020 16:53	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
10/19/2020 16:53	Perfluorohexanoic acid (PFHxA)		0.0067		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/19/2020 16:53	Perfluorooctanesulfonic acid (PFOS)		0.0021		ug/L	0.0020
10/19/2020 16:53	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		<b>202010150636 IX-8M-20201015</b>				
10/19/2020 17:03	Perfluorobutanesulfonic acid (PFBS)		0.0038		ug/L	0.0020
10/19/2020 17:03	Perfluoroheptanoic acid (PFHpA)		0.0050		ug/L	0.0020
10/19/2020 17:03	Perfluorohexanoic acid (PFHxA)		0.0075		ug/L	0.0020
10/19/2020 17:03	Perfluorononanoic acid (PFNA)		0.0024		ug/L	0.0020
10/19/2020 17:03	Perfluorooctanesulfonic acid (PFOS)		0.0020		ug/L	0.0020
10/19/2020 17:03	Perfluorooctanoic acid (PFOA)		0.017		ug/L	0.0020
		<b>202010150695 GAC-1M-20201015</b>				
10/19/2020 17:12	Perfluorobutanesulfonic acid (PFBS)		0.0032		ug/L	0.0020
10/19/2020 17:12	Perfluorohexanoic acid (PFHxA)		0.0026		ug/L	0.0020
10/19/2020 17:12	Perfluorooctanesulfonic acid (PFOS)		0.0026		ug/L	0.0020
10/19/2020 17:12	Perfluorooctanoic acid (PFOA)		0.0036		ug/L	0.0020
		<b>202010150696 GAC-2M-20201015</b>				
10/20/2020 04:37	Perfluorobutanesulfonic acid (PFBS)		0.0041		ug/L	0.0020
10/20/2020 04:37	Perfluorohexanoic acid (PFHxA)		0.0025		ug/L	0.0020
		<b>202010150697 GAC-3M-20201015</b>				
10/19/2020 17:22	Perfluorobutanesulfonic acid (PFBS)		0.0043		ug/L	0.0020
10/19/2020 17:22	Perfluorohexanoic acid (PFHxA)		0.0028		ug/L	0.0020
		<b>202010150699 IX-1M-20201015</b>				
10/20/2020 04:56	Perfluorohexanoic acid (PFHxA)		0.0024		ug/L	0.0020
10/20/2020 04:56	Perfluorooctanesulfonic acid (PFOS)		0.0037		ug/L	0.0020
10/20/2020 04:56	Perfluorooctanoic acid (PFOA)		0.0063		ug/L	0.0020
		<b>202010150700 IX-2M-20201015</b>				
10/20/2020 05:05	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
10/20/2020 05:05	Perfluorooctanoic acid (PFOA)		0.0086		ug/L	0.0020
		<b>202010150701 IX-3M-20201015</b>				
10/20/2020 05:15	Perfluorobutanesulfonic acid (PFBS)		0.0031		ug/L	0.0020
10/20/2020 05:15	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
10/20/2020 05:15	Perfluorooctanoic acid (PFOA)		0.0098		ug/L	0.0020
		<b>202010150702 IX-4M-20201015</b>				
10/20/2020 05:36	Perfluorobutanesulfonic acid (PFBS)		0.0027		ug/L	0.0020
10/20/2020 05:36	Perfluoroheptanoic acid (PFHpA)		0.0020		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/20/2020 05:36	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
10/20/2020 05:36	Perfluorooctanesulfonic acid (PFOS)		0.0020		ug/L	0.0020
10/20/2020 05:36	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
		<b>202010150703      <u>GAC-5M-20201015</u></b>				
10/20/2020 05:46	Perfluorobutanesulfonic acid (PFBS)		0.010		ug/L	0.0020
10/20/2020 05:46	Perfluoroheptanoic acid (PFHpA)		0.0042		ug/L	0.0020
10/20/2020 05:46	Perfluorohexanesulfonic acid (PFHxS)		0.0043		ug/L	0.0020
10/20/2020 05:46	Perfluorohexanoic acid (PFHxA)		0.0080		ug/L	0.0020
10/20/2020 05:46	Perfluorononanoic acid (PFNA)		0.0022		ug/L	0.0020
10/20/2020 05:46	Perfluorooctanesulfonic acid (PFOS)		0.017		ug/L	0.0020
10/20/2020 05:46	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
		<b>202010150704      <u>GAC-6M-20201015</u></b>				
10/20/2020 05:56	Perfluorobutanesulfonic acid (PFBS)		0.013		ug/L	0.0020
10/20/2020 05:56	Perfluoroheptanoic acid (PFHpA)		0.0050		ug/L	0.0020
10/20/2020 05:56	Perfluorohexanesulfonic acid (PFHxS)		0.0044		ug/L	0.0020
10/20/2020 05:56	Perfluorohexanoic acid (PFHxA)		0.0085		ug/L	0.0020
10/20/2020 05:56	Perfluorooctanesulfonic acid (PFOS)		0.0037		ug/L	0.0020
10/20/2020 05:56	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		<b>202010150705      <u>GAC-7M-20201015</u></b>				
10/20/2020 06:06	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
10/20/2020 06:06	Perfluoroheptanoic acid (PFHpA)		0.0044		ug/L	0.0020
10/20/2020 06:06	Perfluorohexanesulfonic acid (PFHxS)		0.0052		ug/L	0.0020
10/20/2020 06:06	Perfluorohexanoic acid (PFHxA)		0.0076		ug/L	0.0020
10/20/2020 06:06	Perfluorononanoic acid (PFNA)		0.0021		ug/L	0.0020
10/20/2020 06:06	Perfluorooctanesulfonic acid (PFOS)		0.015		ug/L	0.0020
10/20/2020 06:06	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
		<b>202010150706      <u>GAC-8M-20201015</u></b>				
10/20/2020 06:15	Perfluorobutanesulfonic acid (PFBS)		0.0086		ug/L	0.0020
10/20/2020 06:15	Perfluoroheptanoic acid (PFHpA)		0.0029		ug/L	0.0020
10/20/2020 06:15	Perfluorohexanesulfonic acid (PFHxS)		0.0030		ug/L	0.0020
10/20/2020 06:15	Perfluorohexanoic acid (PFHxA)		0.0063		ug/L	0.0020
10/20/2020 06:15	Perfluorooctanesulfonic acid (PFOS)		0.010		ug/L	0.0020
10/20/2020 06:15	Perfluorooctanoic acid (PFOA)		0.0089		ug/L	0.0020
		<b>202010150707      <u>IX-5-20201015</u></b>				
10/20/2020 06:25	Perfluorohexanoic acid (PFHxA)		0.0046		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/20/2020 06:25	Perfluorooctanoic acid (PFOA)		0.0021		ug/L	0.0020
	<b>202010150708</b>	<b><u>IX-6-20201015</u></b>				
10/20/2020 06:34	Perfluorohexanoic acid (PFHxA)		0.0059		ug/L	0.0020
	<b>202010150709</b>	<b><u>IX-7-20201015</u></b>				
10/20/2020 06:44	Perfluoroheptanoic acid (PFHpA)		0.0034		ug/L	0.0020
10/20/2020 06:44	Perfluorohexanoic acid (PFHxA)		0.0070		ug/L	0.0020
10/20/2020 06:44	Perfluorooctanoic acid (PFOA)		0.0024		ug/L	0.0020
	<b>202010150710</b>	<b><u>IX-8-20201015</u></b>				
10/20/2020 06:53	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
10/20/2020 06:53	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020
	<b>202010150711</b>	<b><u>MB-INF-20201015</u></b>				
10/16/2020 21:12	Alkalinity in CaCO3 units		160		mg/L	2.0
10/17/2020 15:15	Arsenic Total ICAP/MS		1.4	10	ug/L	1.0
10/20/2020 13:09	Calcium Total ICAP		61		mg/L	1.0
10/15/2020 20:22	Chloride		50	250	mg/L	2.5
10/23/2020 13:23	Hexavalent chromium(Dissolved)		0.44		ug/L	0.020
10/20/2020 13:09	Magnesium Total ICAP		12		mg/L	0.10
10/15/2020 20:22	Nitrate as Nitrogen by IC		2.7	10	mg/L	0.50
10/15/2020 20:22	Nitrate as NO3 (calc)		12	45	mg/L	2.2
10/22/2020 18:36	Oil and Grease by 1664(subbed)		1.88		mg/L	1
10/20/2020 07:03	Perfluorobutanesulfonic acid (PFBS)		0.0096		ug/L	0.0020
10/20/2020 07:03	Perfluorodecanoic acid (PFDA)		0.0021		ug/L	0.0020
10/20/2020 07:03	Perfluoroheptanoic acid (PFHpA)		0.0044		ug/L	0.0020
10/20/2020 07:03	Perfluorohexanesulfonic acid (PFHxS)		0.0065		ug/L	0.0020
10/20/2020 07:03	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020
10/20/2020 07:03	Perfluorononanoic acid (PFNA)		0.0038		ug/L	0.0020
10/20/2020 07:03	Perfluorooctanesulfonic acid (PFOS)		0.039		ug/L	0.0020
10/20/2020 07:03	Perfluorooctanoic acid (PFOA)		0.017		ug/L	0.0020
10/20/2020 13:09	Potassium Total ICAP		4.0		mg/L	1.0
10/20/2020 13:09	Sodium Total ICAP		52		mg/L	1.0
10/15/2020 20:22	Sulfate		77	250	mg/L	2.5
10/19/2020 22:22	Total Dissolved Solids (TDS)		400	500	mg/L	10
10/20/2020 17:11	Total Hardness as CaCO3 by ICP (calc)		200		mg/L	3.0
10/15/2020 20:22	Total Nitrate, Nitrite-N, CALC		2.7		mg/L	0.10
10/28/2020 07:15	Total Organic Carbon		0.89		mg/L	0.20
10/17/2020 15:59	Uranium by ICPMS as pCi/L		1.3		pCi/L	0.70

**SUMMARY OF POSITIVE DATA ONLY**

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**Report:** 898631  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

**Water Replenishment District**  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

Samples Received on:  
10/15/2020 1649

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/17/2020 15:15	Uranium ICAP/MS		2.0	30	ug/L	1.0



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**Water Replenishment District**  
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 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20201015 (202010150620)</b>					<b>Sampled on 10/15/2020 0900</b>				
Static ID: SET A 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	13C2-PFDA	102	%		1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	13C2-PFHxA	105	%		1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	98	%		1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	96	%		1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	94	%		1

<b>GAC-2-20201015 (202010150621)</b>					<b>Sampled on 10/15/2020 0903</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	13C2-PFDA	106	%		1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	13C2-PFHxA	112	%		1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	90	%		1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	104	%		1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	96	%		1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**GAC-3-20201015 (202010150622)**

Sampled on 10/15/2020 0906

**EPA 537.1 - EPA Method 537.1**

10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	13C2-PFDA	113	%		1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	13C2-PFHxA	123	%		1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	112	%		1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	106	%		1

**GAC-4-20201015 (202010150623)**

Sampled on 10/15/2020 0909

**EPA 537.1 - EPA Method 537.1**

10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	13C2-PFDA	105	%		1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	13C2-PFHxA	112	%		1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	103	%		1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	97	%		1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	94	%		1

**IX-1-20201015 (202010150624)**

Sampled on 10/15/2020 0912

**EPA 537.1 - EPA Method 537.1**

10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0028	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	13C2-PFDA	112	%		1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	13C2-PFHxA	121	%		1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	110	%		1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**IX-2-20201015 (202010150625)**

**Sampled on 10/15/2020 0915**

**EPA 537.1 - EPA Method 537.1**

10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	13C2-PFDA	102	%		1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	13C2-PFHxA	108	%		1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	101	%		1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	97	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	94	%		1
<b>IX-3-20201015 (202010150626)</b>					<b>Sampled on 10/15/2020 0918</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	13C2-PFDA	109	%		1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	13C2-PFHxA	117	%		1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	110	%		1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**IX-4-20201015 (202010150627)**

**Sampled on 10/15/2020 0921**

**EPA 537.1 - EPA Method 537.1**

10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0044	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	13C2-PFDA	105	%		1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	13C2-PFHxA	119	%		1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	109	%		1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	96	%		1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	89	%		1

**LH-INF-20201015 (202010150628)**

**Sampled on 10/15/2020 0950**

**EPA 200.8 - ICPMS Metals**

10/16/20	10/17/20 15:09	1281647	1281906	(EPA 200.8)	Arsenic Total ICAP/MS	2.8	ug/L	1.0	1
10/16/20	10/17/20 15:09	1281647	1281906	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
10/16/20	10/17/20 15:09	1281647	1281906	(EPA 200.8)	Uranium ICAP/MS	5.5	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

10/16/20	10/20/20 13:06	1281647	1282435	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
10/16/20	10/20/20 13:06	1281647	1282435	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
10/16/20	10/20/20 13:06	1281647	1282435	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
10/16/20	10/20/20 13:06	1281647	1282435	(EPA 200.7)	Potassium Total ICAP	4.7	mg/L	1.0	1
10/16/20	10/20/20 13:06	1281647	1282435	(EPA 200.7)	Sodium Total ICAP	69	mg/L	1.0	1

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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>SM 5310C - Total Organic Carbon</b>									
	10/28/20 06:58		1284012	(SM 5310C)	Total Organic Carbon	0.81	mg/L	0.20	1
<b>EPA 200.8 - Uranium by ICPMS as pCi/L</b>									
	10/17/20 15:59			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.7 (c)	pCi/L	0.70	1
<b>SM 2340B - Total Hardness as CaCO3 by ICP</b>									
	10/20/20 17:11			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
<b>EPA 218.6 - Hexavalent chromium(Dissolved)</b>									
	10/23/20 13:13		1283454	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.65	ug/L	0.020	1
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>									
	10/15/20 21:01		1281618	(EPA 300.0)	Nitrate as Nitrogen by IC	3.0	mg/L	0.50	5
	10/15/20 21:01		1281618	(EPA 300.0)	Nitrate as NO3 (calc)	13	mg/L	2.2	5
	10/15/20 21:01		1281618	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	10/15/20 21:01		1281618	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	3.0	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	10/15/20 21:01		1281621	(EPA 300.0)	Chloride	110	mg/L	2.5	5
	10/15/20 21:01		1281621	(EPA 300.0)	Sulfate	180	mg/L	2.5	5
<b>EPA 314.0 - Perchlorate</b>									
	10/21/20 19:46	(1)	1281864	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0067	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0020	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1

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**Water Replenishment District**  
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 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	13C2-PFDA	114	%		1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	13C2-PFHxA	123	%		1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	112	%		1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	96	%		1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	104	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	10/20/20 17:25			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.98	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,1,1-Trichloroethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,1,2-Trichloroethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,1-Dichloroethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,1-Dichloroethylene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,1-Dichloropropene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,2,3-Trichloropropane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,2,4-Trichlorobenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,2,4-Trimethylbenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,2-Dichloroethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,2-Dichloropropane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,3,5-Trimethylbenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,3-Dichloropropane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	2,2-Dichloropropane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	2-Butanone (MEK)	ND (Q2)	ug/L	5.0	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND (Q2)	ug/L	5.0	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Benzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Bromobenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Bromochloromethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Bromodichloromethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Bromoethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Bromoform	ND (Q2)	ug/L	0.50	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Carbon disulfide	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Carbon Tetrachloride	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Chlorobenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Chlorodibromomethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Chloroethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Chloroform (Trichloromethane)	0.62 (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	cis-1,2-Dichloroethylene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	cis-1,3-Dichloropropene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Dibromomethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Dichlorodifluoromethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Dichloromethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Di-isopropyl ether	ND (Q2)	ug/L	3.0	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Ethyl benzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Hexachlorobutadiene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Isopropylbenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	m,p-Xylenes	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Naphthalene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	n-Butylbenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	n-Propylbenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	o-Chlorotoluene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	o-Xylene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	p-Chlorotoluene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	p-Isopropyltoluene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	sec-Butylbenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Styrene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	tert-amyl Methyl Ether	ND (Q2)	ug/L	3.0	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	tert-Butyl Ethyl Ether	ND (Q2)	ug/L	3.0	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	tert-Butylbenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Tetrachloroethylene (PCE)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Toluene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1

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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Total THM	0.62	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	trans-1,2-Dichloroethylene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	trans-1,3-Dichloropropene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Trichloroethylene (TCE)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Trichlorofluoromethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Vinyl chloride (VC)	ND (Q2)	ug/L	0.30	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,2-Dichloroethane-d4	113	%		1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	4-Bromofluorobenzene	95	%		1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Toluene-d8	94	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	10/16/20 21:36		1282170	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
10/16/20	10/19/20 22:21	1282296	1282294	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	680	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	10/19/20 17:52		1282304	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1

**GAC-5-20201015 (202010150629)**

**Sampled on 10/15/2020 1525**

**EPA 537.1 - EPA Method 537.1**

10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0091	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0021	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0073	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0048	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0076	ug/L	0.0020	1

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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	13C2-PFDA	104	%		1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	13C2-PFHxA	111	%		1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	89	%		1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	96	%		1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**GAC-6-20201015 (202010150630)**

Sampled on 10/15/2020 1528

**EPA 537.1 - EPA Method 537.1**

10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.014	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0092	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	13C2-PFDA	108	%		1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	13C2-PFHxA	115	%		1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	90	%		1

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Report: 898631  
 Project: 0250000  
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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	107	%		1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**GAC-7-20201015 (202010150631)**

**Sampled on 10/15/2020 1531**

**EPA 537.1 - EPA Method 537.1**

10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0027	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0078	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0034	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	13C2-PFDA	108	%		1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	13C2-PFHxA	118	%		1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	90	%		1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	107	%		1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	94	%		1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	100	%		1

**GAC-8-20201015 (202010150632)**

**Sampled on 10/15/2020 1534**

**EPA 537.1 - EPA Method 537.1**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0037	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	13C2-PFDA	103	%		1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	13C2-PFHxA	111	%		1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	90	%		1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	103	%		1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	94	%		1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	94	%		1

**IX-5M-20201015 (202010150633)**

**Sampled on 10/15/2020 1601**

**EPA 537.1 - EPA Method 537.1**

10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.  
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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0021	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0036	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0034	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	13C2-PFDA	105	%		1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	13C2-PFHxA	114	%		1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**IX-6M-20201015 (202010150634)**

**Sampled on 10/15/2020 1604**

**EPA 537.1 - EPA Method 537.1**

10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0021	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0036	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0059	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	13C2-PFDA	104	%		1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	13C2-PFHxA	111	%		1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	99	%		1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**IX-7M-20201015 (202010150635)**

Sampled on 10/15/2020 1607

**EPA 537.1 - EPA Method 537.1**

10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0043	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0067	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0021	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	13C2-PFDA	107	%		1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	13C2-PFHxA	117	%		1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	107	%		1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	96	%		1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	101	%		1

**IX-8M-20201015 (202010150636)**

Sampled on 10/15/2020 1610

**EPA 537.1 - EPA Method 537.1**

10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0038	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0050	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0075	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0024	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0020	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.017	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	13C2-PFDA	109	%		1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	13C2-PFHxA	116	%		1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	107	%		1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**GAC-1M-20201015 (202010150695)**

Sampled on 10/15/2020 0924

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0032	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0026	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0026	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0036	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	13C2-PFDA	104	%		1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	13C2-PFHxA	114	%		1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	103	%		1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**GAC-2M-20201015 (202010150696)**

Sampled on 10/15/2020 0927

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0041	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0025	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	13C2-PFDA	106	%		1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	13C2-PFHxA	107	%		1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	106	%		1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	104	%		1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**GAC-3M-20201015 (202010150697)**

Sampled on 10/15/2020 0930

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0043	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0028	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	13C2-PFDA	102	%		1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	13C2-PFHxA	108	%		1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	91	%		1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	100	%		1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	89	%		1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	96	%		1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**GAC-4M-20201015 (202010150698)**

Sampled on 10/15/2020 0933

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	13C2-PFDA	105	%		1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	13C2-PFHxA	110	%		1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	91	%		1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	108	%		1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	86	%		1

**IX-1M-20201015 (202010150699)**

Sampled on 10/15/2020 0936

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0037	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0063	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	13C2-PFDA	107	%		1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	13C2-PFHxA	108	%		1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	108	%		1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	99	%		1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	90	%		1

**IX-2M-20201015 (202010150700)**

Sampled on 10/15/2020 0939

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0086	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	13C2-PFDA	118	%		1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	13C2-PFHxA	122	%		1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1

Rounding on totals after summation.  
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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	119	%		1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**IX-3M-20201015 (202010150701)**

**Sampled on 10/15/2020 0942**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0031	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0098	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	13C2-PFDA	104	%		1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	13C2-PFHxA	104	%		1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	103	%		1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**IX-4M-20201015 (202010150702)**

**Sampled on 10/15/2020 0945**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0027	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0020	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0020	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	13C2-PFDA	107	%		1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	13C2-PFHxA	109	%		1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	102	%		1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**GAC-5M-20201015 (202010150703)**

Sampled on 10/15/2020 1549

**EPA 537.1 - EPA Method 537.1**

10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.  
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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0042	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0043	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0080	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0022	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.017	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	13C2-PFDA	105	%		1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	13C2-PFHxA	107	%		1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	99	%		1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	90	%		1

**GAC-6M-20201015 (202010150704)**

**Sampled on 10/15/2020 1552**

**EPA 537.1 - EPA Method 537.1**

10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.013	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0050	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0044	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0085	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0037	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	13C2-PFDA	106	%		1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	13C2-PFHxA	105	%		1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	92	%		1

**GAC-7M-20201015 (202010150705)**

Sampled on 10/15/2020 1555

**EPA 537.1 - EPA Method 537.1**

10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0044	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0052	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0076	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0021	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.015	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	13C2-PFDA	104	%		1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	13C2-PFHxA	107	%		1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	107	%		1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	99	%		1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	94	%		1

**GAC-8M-20201015 (202010150706)**

Sampled on 10/15/2020 1558

**EPA 537.1 - EPA Method 537.1**

10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0086	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0029	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0030	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.010	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0089	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	13C2-PFDA	107	%		1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	13C2-PFHxA	107	%		1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1

Rounding on totals after summation.  
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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	106	%		1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	97	%		1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	88	%		1

**IX-5-20201015 (202010150707)**

**Sampled on 10/15/2020 1537**

**EPA 537.1 - EPA Method 537.1**

10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0021	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	13C2-PFDA	104	%		1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	13C2-PFHxA	107	%		1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	106	%		1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	101	%		1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	90	%		1

**IX-6-20201015 (202010150708)**

**Sampled on 10/15/2020 1540**

**EPA 537.1 - EPA Method 537.1**

Rounding on totals after summation.  
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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0059	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	13C2-PFDA	106	%		1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	13C2-PFHxA	109	%		1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	106	%		1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	99	%		1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**IX-7-20201015 (202010150709)**

**Sampled on 10/15/2020 1543**

**EPA 537.1 - EPA Method 537.1**

10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.  
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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0034	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0070	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0024	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	13C2-PFDA	105	%		1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	13C2-PFHxA	110	%		1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	107	%		1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	100	%		1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**IX-8-20201015 (202010150710)**

**Sampled on 10/15/2020 1546**

**EPA 537.1 - EPA Method 537.1**

10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	13C2-PFDA	101	%		1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	13C2-PFHxA	111	%		1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	89	%		1

**MB-INF-20201015 (202010150711)**

Sampled on 10/15/2020 1620

**EPA 200.8 - ICPMS Metals**

10/16/20	10/17/20 15:15	1281647	1281906	(EPA 200.8)	Arsenic Total ICAP/MS	1.4	ug/L	1.0	1
10/16/20	10/17/20 15:15	1281647	1281906	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
10/16/20	10/17/20 15:15	1281647	1281906	(EPA 200.8)	Uranium ICAP/MS	2.0	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

10/16/20	10/20/20 13:09	1281647	1282435	(EPA 200.7)	Calcium Total ICAP	61	mg/L	1.0	1
10/16/20	10/20/20 13:09	1281647	1282435	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
10/16/20	10/20/20 13:09	1281647	1282435	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	0.10	1
10/16/20	10/20/20 13:09	1281647	1282435	(EPA 200.7)	Potassium Total ICAP	4.0	mg/L	1.0	1
10/16/20	10/20/20 13:09	1281647	1282435	(EPA 200.7)	Sodium Total ICAP	52	mg/L	1.0	1

**SM 5310C - Total Organic Carbon**

10/28/20 07:15			1284012	(SM 5310C)	Total Organic Carbon	0.89	mg/L	0.20	1
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**EPA 200.8 - Uranium by ICPMS as pCi/L**

10/17/20 15:59				(EPA 200.8)	Uranium by ICPMS as pCi/L	1.3 (c)	pCi/L	0.70	1
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**SM 2340B - Total Hardness as CaCO3 by ICP**

10/20/20 17:11				(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	200 (c)	mg/L	3.0	1
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**EPA 218.6 - Hexavalent chromium(Dissolved)**

10/23/20 13:23			1283454	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.44	ug/L	0.020	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

Rounding on totals after summation.  
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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	10/15/20 20:22		1281618	(EPA 300.0)	Nitrate as Nitrogen by IC	2.7	mg/L	0.50	5
	10/15/20 20:22		1281618	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
	10/15/20 20:22		1281618	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	10/15/20 20:22		1281618	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.7	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	10/15/20 20:22		1281621	(EPA 300.0)	Chloride	50	mg/L	2.5	5
	10/15/20 20:22		1281621	(EPA 300.0)	Sulfate	77	mg/L	2.5	5
<b>EPA 314.0 - Perchlorate</b>									
	10/21/20 20:10	(1)	1281864	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0096	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0021	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0044	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0065	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0038	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.039	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.017	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	13C2-PFDA	102	%		1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	13C2-PFHxA	109	%		1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	109	%		1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	96	%		1

Rounding on totals after summation.  
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**Report:** 898631  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

**Water Replenishment District**

Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	88	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	10/22/20 18:36			(EPA 1664)	Oil and Grease by 1664(subbed)	1.88	mg/L	1	1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	10/16/20 21:12		1282170	(SM 2320B)	Alkalinity in CaCO3 units	160	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
10/16/20	10/19/20 22:22	1282296	1282294	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	400	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	10/19/20 17:53		1282304	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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**Report:** 898631  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1281618**

202010150628 LH-INF-20201015  
 202010150711 MB-INF-20201015

**Analysis Date: 10/15/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1281621**

202010150628 LH-INF-20201015  
 202010150711 MB-INF-20201015

**Analysis Date: 10/15/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Perchlorate**

**Analytical Batch: 1281864**

202010150628 LH-INF-20201015  
 202010150711 MB-INF-20201015

**Analysis Date: 10/21/2020**

Analyzed by: H5VG  
 Analyzed by: H5VG

**ICPMS Metals**

**Prep Batch: 1281647 Analytical Batch: 1281906**

202010150628 LH-INF-20201015  
 202010150711 MB-INF-20201015

**Analysis Date: 10/17/2020**

Analyzed by: DHX7  
 Analyzed by: DHX7

**Alkalinity in CaCO3 units**

**Analytical Batch: 1282170**

202010150628 LH-INF-20201015  
 202010150711 MB-INF-20201015

**Analysis Date: 10/16/2020**

Analyzed by: ZS6I  
 Analyzed by: ZS6I

**Total Dissolved Solids (TDS)**

**Prep Batch: 1282296 Analytical Batch: 1282294**

202010150628 LH-INF-20201015  
 202010150711 MB-INF-20201015

**Analysis Date: 10/19/2020**

Analyzed by: TJ52  
 Analyzed by: TJ52

**Total Suspended Solids (TSS)**

**Analytical Batch: 1282304**

202010150628 LH-INF-20201015  
 202010150711 MB-INF-20201015

**Analysis Date: 10/19/2020**

Analyzed by: TJ52  
 Analyzed by: TJ52

**ICP Metals**

**Prep Batch: 1281647 Analytical Batch: 1282435**

202010150628 LH-INF-20201015  
 202010150711 MB-INF-20201015

**Analysis Date: 10/20/2020**

Analyzed by: NINA  
 Analyzed by: NINA

**EPA Method 537.1**

**Prep Batch: 1281815 Analytical Batch: 1282526**

202010150620 GAC-1-20201015  
 202010150621 GAC-2-20201015  
 202010150622 GAC-3-20201015  
 202010150623 GAC-4-20201015  
 202010150624 IX-1-20201015  
 202010150625 IX-2-20201015  
 202010150626 IX-3-20201015

**Analysis Date: 10/19/2020**

Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ

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**Report:** 898631  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District

202010150627	IX-4-20201015	Analyzed by: SZZ
202010150628	LH-INF-20201015	Analyzed by: SZZ
202010150629	GAC-5-20201015	Analyzed by: SZZ
202010150630	GAC-6-20201015	Analyzed by: SZZ
202010150631	GAC-7-20201015	Analyzed by: SZZ
202010150632	GAC-8-20201015	Analyzed by: SZZ
202010150633	IX-5M-20201015	Analyzed by: SZZ
202010150634	IX-6M-20201015	Analyzed by: SZZ
202010150635	IX-7M-20201015	Analyzed by: SZZ
202010150636	IX-8M-20201015	Analyzed by: SZZ
202010150695	GAC-1M-20201015	Analyzed by: SZZ
202010150697	GAC-3M-20201015	Analyzed by: SZZ

**EPA Method 537.1**

**Prep Batch: 1282094 Analytical Batch: 1282547**

**Analysis Date: 10/20/2020**

202010150696	GAC-2M-20201015	Analyzed by: KAM
202010150698	GAC-4M-20201015	Analyzed by: KAM
202010150699	IX-1M-20201015	Analyzed by: KAM
202010150700	IX-2M-20201015	Analyzed by: KAM
202010150701	IX-3M-20201015	Analyzed by: KAM
202010150702	IX-4M-20201015	Analyzed by: KAM
202010150703	GAC-5M-20201015	Analyzed by: KAM
202010150704	GAC-6M-20201015	Analyzed by: KAM
202010150705	GAC-7M-20201015	Analyzed by: KAM
202010150706	GAC-8M-20201015	Analyzed by: KAM
202010150707	IX-5-20201015	Analyzed by: KAM
202010150708	IX-6-20201015	Analyzed by: KAM
202010150709	IX-7-20201015	Analyzed by: KAM
202010150710	IX-8-20201015	Analyzed by: KAM
202010150711	MB-INF-20201015	Analyzed by: KAM

**Volatile Organics by GCMS**

**Prep Batch: 1282988 Analytical Batch: 1282994**

**Analysis Date: 10/21/2020**

202010150628	LH-INF-20201015	Analyzed by: TR7W
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**Hexavalent chromium(Dissolved)**

**Analytical Batch: 1283454**

**Analysis Date: 10/23/2020**

202010150628	LH-INF-20201015	Analyzed by: TLH
202010150711	MB-INF-20201015	Analyzed by: TLH

**Total Organic Carbon**

**Analytical Batch: 1284012**

**Analysis Date: 10/28/2020**

202010150628	LH-INF-20201015	Analyzed by: ZB2Z
202010150711	MB-INF-20201015	Analyzed by: ZB2Z

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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1281618</b>					<b>Analysis Date: 10/15/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.59	mg/L	104	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.53	mg/L	101	(90-110)	20	2.3
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0502	mg/L	100	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0168	mg/L	134	(50-150)		
MS_202010150637	Nitrate as Nitrogen by IC	14	6.5	20.5	mg/L	110	(80-120)		
MS_202010150711	Nitrate as Nitrogen by IC	2.7	6.5	9.54	mg/L	109	(80-120)		
MSD_202010150637	Nitrate as Nitrogen by IC	14	6.5	20.5	mg/L	110	(80-120)	20	0.087
MSD_202010150711	Nitrate as Nitrogen by IC	2.7	6.5	9.57	mg/L	110	(80-120)	20	0.35
LCS1	Nitrite Nitrogen by IC		1	1.04	mg/L	104	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)	20	1.9
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0525	mg/L	105	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0124	mg/L	99	(50-150)		
MS_202010150637	Nitrite Nitrogen by IC	ND	2.5	2.62	mg/L	105	(80-120)		
MS_202010150711	Nitrite Nitrogen by IC	ND	2.5	2.63	mg/L	105	(80-120)		
MSD_202010150637	Nitrite Nitrogen by IC	ND	2.5	2.65	mg/L	106	(80-120)	20	1.0
MSD_202010150711	Nitrite Nitrogen by IC	ND	2.5	2.63	mg/L	105	(80-120)	20	0.13
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1281621</b>					<b>Analysis Date: 10/15/2020</b>				
LCS1	Chloride		25	27.0	mg/L	108	(90-110)		
LCS2	Chloride		25	26.3	mg/L	105	(90-110)	20	2.6
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.457	mg/L	92	(50-150)		
MS_202010150637	Chloride	31	65	103	mg/L	116	(80-120)		
MS_202010150711	Chloride	50	65	123	mg/L	117	(80-120)		
MSD_202010150637	Chloride	31	65	104	mg/L	117	(80-120)	20	0.91
MSD_202010150711	Chloride	50	65	123	mg/L	117	(80-120)	20	0.10
LCS1	Sulfate		50	53.4	mg/L	107	(90-110)		
LCS2	Sulfate		50	52.1	mg/L	104	(90-110)	20	2.5
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	1.00	mg/L	100	(50-150)		
MRL_W	Sulfate		0.25	0.246	mg/L	98	(50-150)		
MS_202010150637	Sulfate	21	125	159	mg/L	111	(80-120)		

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 898631  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202010150711	Sulfate	77	125	219	mg/L	113	(80-120)		
MSD_202010150637	Sulfate	21	125	161	mg/L	112	(80-120)	20	1.0
MSD_202010150711	Sulfate	77	125	219	mg/L	114	(80-120)	20	0.15

Perchlorate by EPA 314.0

Analytical Batch: 1281864

Analysis Date: 10/21/2020

LCS1	Perchlorate		25	23.5	ug/L	94	(85-115)		
LCS2	Perchlorate		25	23.8	ug/L	95	(85-115)	15	1.3
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	3.49	ug/L	87	(75-125)		
MS_202010140497	Perchlorate	ND	25	22.2	ug/L	89	(80-120)		
MSD_202010140497	Perchlorate	ND	25	21.0	ug/L	84	(80-120)	15	5.4

ICPMS Metals by EPA 200.8

Analytical Batch: 1281906

Analysis Date: 10/17/2020

LCS1	Arsenic Total ICAP/MS		50	53.4	ug/L	107	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	51.8	ug/L	104	(85-115)	20	3.0
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.19	ug/L	119	(50-150)		
MS_202010150186	Arsenic Total ICAP/MS	ND	50	55.9	ug/L	112	(70-130)		
MS2_202010150628	Arsenic Total ICAP/MS	2.8	50	56.4	ug/L	107	(70-130)		
MSD_202010150186	Arsenic Total ICAP/MS	ND	50	54.2	ug/L	108	(70-130)	20	3.1
MSD2_202010150628	Arsenic Total ICAP/MS	2.8	50	56.6	ug/L	108	(70-130)	20	0.32
LCS1	Manganese Total ICAP/MS		100	102	ug/L	102	(85-115)		
LCS2	Manganese Total ICAP/MS		100	99.6	ug/L	100	(85-115)	20	2.4
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.05	ug/L	103	(50-150)		
MS_202010150186	Manganese Total ICAP/MS	ND	100	100	ug/L	100	(70-130)		
MS2_202010150628	Manganese Total ICAP/MS	ND	100	96.4	ug/L	96	(70-130)		
MSD_202010150186	Manganese Total ICAP/MS	ND	100	96.0	ug/L	96	(70-130)	20	4.1
MSD2_202010150628	Manganese Total ICAP/MS	ND	100	96.2	ug/L	96	(70-130)	20	0.18
LCS1	Uranium ICAP/MS		50	50.0	ug/L	100	(85-115)		
LCS2	Uranium ICAP/MS		50	49.9	ug/L	100	(85-115)	20	0.20
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	1.01	ug/L	101	(50-150)		
MS_202010150186	Uranium ICAP/MS	2.3	50	56.0	ug/L	107	(70-130)		
MS2_202010150628	Uranium ICAP/MS	5.5	50	60.2	ug/L	109	(70-130)		
MSD_202010150186	Uranium ICAP/MS	2.3	50	54.7	ug/L	105	(70-130)	20	2.4
MSD2_202010150628	Uranium ICAP/MS	5.5	50	60.3	ug/L	110	(70-130)	20	0.13

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 898631  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Alkalinity in CaCO3 units by SM 2320B</b>									
<b>Analytical Batch: 1282170</b>					<b>Analysis Date: 10/16/2020</b>				
LCS1	Alkalinity in CaCO3 units		100	98.9	mg/L	99	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.0	mg/L	98	(90-110)	20	0.91
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.80	mg/L	90	(50-150)		
MS_202010090100	Alkalinity in CaCO3 units	11	100	125	mg/L	114	(80-120)		
MS_202010150356	Alkalinity in CaCO3 units	73	100	183	mg/L	111	(80-120)		
MSD_202010090100	Alkalinity in CaCO3 units	11	100	124	mg/L	113	(80-120)	20	0.72
MSD_202010150356	Alkalinity in CaCO3 units	73	100	184	mg/L	111	(80-120)	20	0.38
<b>Total Dissolved Solids (TDS) by E160.1/SM2540C</b>									
<b>Analytical Batch: 1282294</b>					<b>Analysis Date: 10/19/2020</b>				
DUP_202009080510	Total Dissolved Solid (TDS)	1500		1490	mg/L		(0-10)	10	0.54
DUP_202010140337	Total Dissolved Solid (TDS)	630		620	mg/L		(0-10)	10	0.96
LCS1	Total Dissolved Solid (TDS)		175	200	mg/L	114	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	716	mg/L	102	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	10.0	mg/L	100	(50-150)		
<b>Total Suspended Solids (TSS) by SM 2540D</b>									
<b>Analytical Batch: 1282304</b>					<b>Analysis Date: 10/19/2020</b>				
DUP_202009090043	Total Suspended Solids (TSS)	930		956	mg/L		(0-10)	10	2.5
DUP_202009090056	Total Suspended Solids (TSS)	ND		1.00	mg/L		(0-10)	10	0.0
LCS1	Total Suspended Solids (TSS)		175	154	mg/L	88	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	174	mg/L	99	(71-107)	20	12
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	10.0	mg/L	100	(50-150)		
<b>ICP Metals by EPA 200.7</b>									
<b>Analytical Batch: 1282435</b>					<b>Analysis Date: 10/20/2020</b>				
LCS1	Calcium Total ICAP		50	49.9	mg/L	100	(85-115)		
LCS2	Calcium Total ICAP		50	50.2	mg/L	100	(85-115)	20	0.60
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.977	mg/L	98	(50-150)		
MS_202010150628	Calcium Total ICAP	110	50	157	mg/L	87	(70-130)		
MS2_202010150394	Calcium Total ICAP	57	50	105	mg/L	95	(70-130)		
MSD_202010150628	Calcium Total ICAP	110	50	159	mg/L	91	(70-130)	20	1.2

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD2_202010150394	Calcium Total ICAP	57	50	106	mg/L	98	(70-130)	20	1.2
LCS1	Iron Total ICAP		5	5.04	mg/L	101	(85-115)		
LCS2	Iron Total ICAP		5	5.06	mg/L	101	(85-115)	20	0.40
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0205	mg/L	102	(50-150)		
MS_202010150628	Iron Total ICAP	ND	5	5.05	mg/L	101	(70-130)		
MS2_202010150394	Iron Total ICAP	ND	5	5.07	mg/L	101	(70-130)		
MSD_202010150628	Iron Total ICAP	ND	5	5.12	mg/L	102	(70-130)	20	1.6
MSD2_202010150394	Iron Total ICAP	ND	5	5.14	mg/L	103	(70-130)	20	1.4
LCS1	Magnesium Total ICAP		20	19.8	mg/L	99	(85-115)		
LCS2	Magnesium Total ICAP		20	19.9	mg/L	100	(85-115)	20	0.50
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0938	mg/L	94	(50-150)		
MS_202010150628	Magnesium Total ICAP	21	20	40.7	mg/L	97	(70-130)		
MS2_202010150394	Magnesium Total ICAP	18	20	37.9	mg/L	98	(70-130)		
MSD_202010150628	Magnesium Total ICAP	21	20	41.3	mg/L	100	(70-130)	20	1.4
MSD2_202010150394	Magnesium Total ICAP	18	20	38.4	mg/L	100	(70-130)	20	1.3
LCS1	Potassium Total ICAP		20	20.0	mg/L	100	(85-115)		
LCS2	Potassium Total ICAP		20	20.1	mg/L	100	(85-115)	20	0.50
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.724	mg/L	72	(50-150)		
MS_202010150628	Potassium Total ICAP	4.7	20	26.3	mg/L	108	(70-130)		
MS2_202010150394	Potassium Total ICAP	1.8	20	23.5	mg/L	108	(70-130)		
MSD_202010150628	Potassium Total ICAP	4.7	20	26.7	mg/L	110	(70-130)	20	1.5
MSD2_202010150394	Potassium Total ICAP	1.8	20	23.8	mg/L	110	(70-130)	20	1.6
LCS1	Sodium Total ICAP		50	49.6	mg/L	99	(85-115)		
LCS2	Sodium Total ICAP		50	49.7	mg/L	99	(85-115)	20	0.20
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.931	mg/L	93	(50-150)		
MS_202010150628	Sodium Total ICAP	69	50	113	mg/L	88	(70-130)		
MS2_202010150394	Sodium Total ICAP	60	50	104	mg/L	89	(70-130)		
MSD_202010150628	Sodium Total ICAP	69	50	115	mg/L	91	(70-130)	20	1.5
MSD2_202010150394	Sodium Total ICAP	60	50	106	mg/L	92	(70-130)	20	1.7

EPA Method 537.1 by EPA 537.1

Prep Batch: 1281815 Analytical Batch: 1282526

Analysis Date: 10/19/2020

DUP_202010150623	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0496	ug/L	105	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 898631  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0491	ug/L	104	(70-130)	30	1.0
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00185	ug/L	99	(50-150)		
MS_202010150620	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00202	ug/L	106	(50-150)		
DUP_202010150623	13C2-PFDA (S)			103	%	103	(70-130)		
LCS3	13C2-PFDA (S)		100	109	%	109	(70-130)		
LCS4	13C2-PFDA (S)		100	106	%	106	(70-130)		
MBLK	13C2-PFDA (S)			103	%	103	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	105	%	105	(70-130)		
MS_202010150620	13C2-PFDA (S)		100	111	%	111	(70-130)		
DUP_202010150623	13C2-PFHxA (S)			111	%	111	(70-130)		
LCS3	13C2-PFHxA (S)		100	114	%	115	(70-130)		
LCS4	13C2-PFHxA (S)		100	111	%	111	(70-130)		
MBLK	13C2-PFHxA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	113	%	113	(70-130)		
MS_202010150620	13C2-PFHxA (S)		100	116	%	117	(70-130)		
DUP_202010150623	13C2-PFOA- IS#1 (I)			92.7	%	93	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	91.3	%	91	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	89.4	%	89	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			90.3	%	90	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	94.1	%	94	(50-150)		
MS_202010150620	13C2-PFOA- IS#1 (I)		100	94.8	%	95	(50-150)		
DUP_202010150623	13C3-HFPO-DA (S)			104	%	104	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
MBLK	13C3-HFPO-DA (S)			103	%	103	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
MS_202010150620	13C3-HFPO-DA (S)		100	110	%	110	(70-130)		
DUP_202010150623	13C4-PFOS- IS#2 (I)			91.7	%	92	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	92.6	%	93	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	92.8	%	93	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			95.3	%	95	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	92.5	%	92	(50-150)		
MS_202010150620	13C4-PFOS- IS#2 (I)		100	95.6	%	96	(50-150)		
DUP_202010150623	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0545	ug/L	112	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0555	ug/L	115	(70-130)	30	1.8
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00225	ug/L	119	(50-150)		
MS_202010150620	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00234	ug/L	121	(50-150)		
DUP_202010150623	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0518	ug/L	111	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0511	ug/L	110	(70-130)	30	1.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00202	ug/L	109	(50-150)		
MS_202010150620	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00210	ug/L	112	(50-150)		
DUP_202010150623	d3-NMeFOSAA (I)			98.0	%	98	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	98.4	%	98	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	95.1	%	95	(50-150)		
MBLK	d3-NMeFOSAA (I)			96.5	%	97	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	98.8	%	99	(50-150)		
MS_202010150620	d3-NMeFOSAA (I)		100	99.4	%	99	(50-150)		
DUP_202010150623	d5-NEtFOSAA (S)			91.0	%	91	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	95.0	%	95	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	89.2	%	89	(70-130)		
MBLK	d5-NEtFOSAA (S)			89.2	%	89	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	94.2	%	94	(70-130)		
MS_202010150620	d5-NEtFOSAA (S)		100	96.3	%	96	(70-130)		
DUP_202010150623	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0546	ug/L	109	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0554	ug/L	111	(70-130)	30	1.5
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00216	ug/L	108	(50-150)		
MS_202010150620	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00232	ug/L	116	(50-150)		
DUP_202010150623	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0510	ug/L	102	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0526	ug/L	105	(70-130)	30	3.1
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00212	ug/L	106	(50-150)		
MS_202010150620	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00227	ug/L	106	(50-150)		
DUP_202010150623	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0533	ug/L	107	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0550	ug/L	110	(70-130)	30	3.1
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00227	ug/L	113	(50-150)		
MS_202010150620	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00231	ug/L	107	(50-150)		

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202010150623	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0502	ug/L	113	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0512	ug/L	116	(70-130)	30	2.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00203	ug/L	114	(50-150)		
MS_202010150620	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00224	ug/L	122	(50-150)		
DUP_202010150623	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0567	ug/L	113	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0576	ug/L	115	(70-130)	30	1.6
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00222	ug/L	111	(50-150)		
MS_202010150620	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00241	ug/L	114	(50-150)		
DUP_202010150623	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0553	ug/L	111	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0562	ug/L	113	(70-130)	30	1.8
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00215	ug/L	107	(50-150)		
MS_202010150620	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00229	ug/L	111	(50-150)		
DUP_202010150623	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0580	ug/L	116	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0584	ug/L	117	(70-130)	30	0.69
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00239	ug/L	119	(50-150)		
MS_202010150620	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00252	ug/L	122	(50-150)		
DUP_202010150623	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0512	ug/L	112	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0510	ug/L	112	(70-130)	30	0.39
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00205	ug/L	112	(50-150)		
MS_202010150620	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00224	ug/L	122	(50-150)		
DUP_202010150623	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0590	ug/L	118	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0602	ug/L	120	(70-130)	30	1.8
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00247	ug/L	123	(50-150)		
MS_202010150620	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00279	ug/L	128	(50-150)		
DUP_202010150623	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0577	ug/L	115	(70-130)		

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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0589	ug/L	118	(70-130)	30	2.1
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00242	ug/L	121	(50-150)		
MS_202010150620	Perfluorononanoic acid (PFNA)	ND	0.002	0.00256	ug/L	122	(50-150)		
DUP_202010150623	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0510	ug/L	110	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0514	ug/L	111	(70-130)	30	0.78
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00212	ug/L	114	(50-150)		
MS_202010150620	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00223	ug/L	115	(50-150)		
DUP_202010150623	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0578	ug/L	116	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0595	ug/L	119	(70-130)	30	2.9
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00250	ug/L	125	(50-150)		
MS_202010150620	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00267	ug/L	125	(50-150)		
DUP_202010150623	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0550	ug/L	110	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0558	ug/L	112	(70-130)	30	1.4
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00217	ug/L	108	(50-150)		
MS_202010150620	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00225	ug/L	112	(50-150)		
DUP_202010150623	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0545	ug/L	109	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0551	ug/L	110	(70-130)	30	1.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00211	ug/L	106	(50-150)		
MS_202010150620	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00223	ug/L	108	(50-150)		
DUP_202010150623	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0553	ug/L	111	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0550	ug/L	110	(70-130)	30	0.54
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202010150620	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00230	ug/L	112	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1282094 Analytical Batch: 1282547

Analysis Date: 10/20/2020

DUP_202010160117	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
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Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0260	ug/L	111	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0256	ug/L	109	(70-130)	30	1.6
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00210	ug/L	112	(50-150)		
MS1_202010150459	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0258	ug/L	110	(70-130)		
DUP_202010160117	13C2-PFDA (S)			105	%	105	(70-130)		
LCS1	13C2-PFDA (S)		100	99.2	%	99	(70-130)		
LCS2	13C2-PFDA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFDA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	108	%	108	(70-130)		
MS1_202010150459	13C2-PFDA (S)		100	103	%	103	(70-130)		
DUP_202010160117	13C2-PFHxA (S)			110	%	110	(70-130)		
LCS1	13C2-PFHxA (S)		100	104	%	104	(70-130)		
LCS2	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MBLK	13C2-PFHxA (S)			110	%	110	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MS1_202010150459	13C2-PFHxA (S)		100	106	%	106	(70-130)		
DUP_202010160117	13C2-PFOA- IS#1 (I)			97.6	%	98	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	96.9	%	97	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	94.7	%	95	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			98.6	%	99	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	98.2	%	98	(50-150)		
MS1_202010150459	13C2-PFOA- IS#1 (I)		100	96.2	%	96	(50-150)		
DUP_202010160117	13C3-HFPO-DA (S)			104	%	105	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	98.6	%	99	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	99.5	%	100	(70-130)		
MBLK	13C3-HFPO-DA (S)			107	%	107	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MS1_202010150459	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
DUP_202010160117	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MS1_202010150459	13C4-PFOS- IS#2 (I)		100	98.2	%	98	(50-150)		
DUP_202010160117	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0284	ug/L	120	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0287	ug/L	122	(70-130)	30	0.70

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 898631  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00231	ug/L	122	(50-150)		
MS1_202010150459	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0291	ug/L	123	(70-130)		
DUP_202010160117	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0274	ug/L	118	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0269	ug/L	116	(70-130)	30	1.8
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00229	ug/L	123	(50-150)		
MS1_202010150459	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0272	ug/L	117	(70-130)		
DUP_202010160117	d3-NMeFOSAA (I)			103	%	103	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	99.6	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			106	%	106	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MS1_202010150459	d3-NMeFOSAA (I)		100	102	%	103	(50-150)		
DUP_202010160117	d5-NEtFOSAA (S)			88.4	%	88	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	89.8	%	90	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	88.9	%	89	(70-130)		
MBLK	d5-NEtFOSAA (S)			93.2	%	93	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	92.2	%	92	(70-130)		
MS1_202010150459	d5-NEtFOSAA (S)		100	90.4	%	90	(70-130)		
DUP_202010160117	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0302	ug/L	121	(70-130)	30	3.4
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00238	ug/L	119	(50-150)		
MS1_202010150459	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0296	ug/L	118	(70-130)		
DUP_202010160117	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0269	ug/L	108	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0271	ug/L	108	(70-130)	30	0.74
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00221	ug/L	111	(50-150)		
MS1_202010150459	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0265	ug/L	106	(70-130)		
DUP_202010160117	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0272	ug/L	109	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0275	ug/L	110	(70-130)	30	1.1
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202010150459	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0276	ug/L	111	(70-130)		
DUP_202010160117	Perfluorobutanesulfonic acid (PFBS)	0.0034		0.00349	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0252	ug/L	114	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0258	ug/L	117	(70-130)	30	2.7
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00210	ug/L	119	(50-150)		
MS1_202010150459	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0276	ug/L	121	(70-130)		
DUP_202010160117	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0300	ug/L	120	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0302	ug/L	121	(70-130)	30	0.66
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00251	ug/L	126	(50-150)		
MS1_202010150459	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0300	ug/L	120	(70-130)		
DUP_202010160117	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0308	ug/L	123	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0310	ug/L	124	(70-130)	30	0.65
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00242	ug/L	121	(50-150)		
MS1_202010150459	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0284	ug/L	114	(70-130)		
DUP_202010160117	Perfluoroheptanoic acid (PFHpA)	0.0025		0.00240	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0302	ug/L	121	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0305	ug/L	122	(70-130)	30	0.99
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00248	ug/L	124	(50-150)		
MS1_202010150459	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0309	ug/L	121	(70-130)		
DUP_202010160117	Perfluorohexanesulfonic acid (PFHxS)	0.0037		0.00357	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0255	ug/L	112	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0258	ug/L	113	(70-130)	30	1.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00216	ug/L	119	(50-150)		
MS1_202010150459	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0268	ug/L	115	(70-130)		
DUP_202010160117	Perfluorohexanoic acid (PFHxA)	0.0049		0.00471	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0301	ug/L	120	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0307	ug/L	123	(70-130)	30	2.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00247	ug/L	124	(50-150)		
MS1_202010150459	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0312	ug/L	119	(70-130)		
DUP_202010160117	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		

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Report: 898631  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0304	ug/L	122	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0310	ug/L	124	(70-130)	30	2.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00259	ug/L	129	(50-150)		
MS1_202010150459	Perfluorononanoic acid (PFNA)	ND	0.025	0.0305	ug/L	120	(70-130)		
DUP_202010160117	Perfluorooctanesulfonic acid (PFOS)	0.0091		0.00917	ug/L		(0-30)	30	0.22
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0271	ug/L	117	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0272	ug/L	117	(70-130)	30	0.37
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00225	ug/L	121	(50-150)		
MS1_202010150459	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0277	ug/L	115	(70-130)		
DUP_202010160117	Perfluorooctanoic acid (PFOA)	0.0054		0.00558	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0296	ug/L	118	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0300	ug/L	120	(70-130)	30	1.7
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00263	ug/L	131	(50-150)		
MS1_202010150459	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0311	ug/L	120	(70-130)		
DUP_202010160117	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0310	ug/L	124	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0318	ug/L	127	(70-130)	30	2.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00276	ug/L	138	(50-150)		
MS1_202010150459	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0324	ug/L	130	(70-130)		
DUP_202010160117	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0293	ug/L	117	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0297	ug/L	119	(70-130)	30	1.4
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00235	ug/L	117	(50-150)		
MS1_202010150459	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0290	ug/L	116	(70-130)		
DUP_202010160117	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0290	ug/L	116	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0291	ug/L	117	(70-130)	30	0.34
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00227	ug/L	114	(50-150)		
MS1_202010150459	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0286	ug/L	114	(70-130)		

Volatile Organics by GCMS by EPA 524.2

Analytical Batch: 1282994

Analysis Date: 10/21/2020

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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	1,1,1,2-Tetrachloroethane		5	4.60	ug/L	92	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	4.55	ug/L	91	(70-130)	20	1.1
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.400	ug/L	80	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.57	ug/L	91	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.24	ug/L	85	(70-130)	20	7.5
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.450	ug/L	90	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.08	ug/L	102	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	4.74	ug/L	95	(70-130)	20	6.9
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.88	ug/L	98	(70-130)		
LCS2	1,1,2-Trichloroethane		5	4.90	ug/L	98	(70-130)	20	0.41
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,1-Dichloroethane		5	5.05	ug/L	101	(70-130)		
LCS2	1,1-Dichloroethane		5	4.98	ug/L	100	(70-130)	20	1.4
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,1-Dichloroethylene		5	4.92	ug/L	98	(70-130)		
LCS2	1,1-Dichloroethylene		5	4.92	ug/L	98	(70-130)	20	0.0
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.460	ug/L	92	(50-150)		
LCS1	1,1-Dichloropropene		5	4.61	ug/L	92	(70-130)		
LCS2	1,1-Dichloropropene		5	4.46	ug/L	89	(70-130)	20	3.3
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.35	ug/L	87	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	4.63	ug/L	93	(70-130)	20	6.2
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.08	ug/L	102	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.12	ug/L	102	(70-130)	20	0.78
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.27	ug/L	85	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	4.38	ug/L	88	(70-130)	20	2.5

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.450	ug/L	90	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.76	ug/L	95	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	4.50	ug/L	90	(70-130)	20	5.6
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	1,2-Dichloroethane		5	5.38	ug/L	108	(70-130)		
LCS2	1,2-Dichloroethane		5	5.02	ug/L	100	(70-130)	20	6.9
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	107	%	107	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	107	%	107	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			105	%	105	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	104	%	104	(70-130)		
MRL_LW	1,2-Dichloroethane-d4 (S)		5	107	%	107	(70-130)		
LCS1	1,2-Dichloropropane		5	4.84	ug/L	97	(70-130)		
LCS2	1,2-Dichloropropane		5	4.64	ug/L	93	(70-130)	20	4.2
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.71	ug/L	94	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.48	ug/L	90	(70-130)	20	5.0
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.410	ug/L	82	(50-150)		
LCS1	1,3-Dichloropropane		5	4.95	ug/L	99	(70-130)		
LCS2	1,3-Dichloropropane		5	4.92	ug/L	98	(70-130)	20	0.61
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.440	ug/L	88	(50-150)		
LCS1	2,2-Dichloropropane		5	4.13	ug/L	83	(70-130)		
LCS2	2,2-Dichloropropane		5	4.24	ug/L	85	(70-130)	20	2.6
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.380	ug/L	76	(50-150)		
LCS1	2-Butanone (MEK)		50	51.8	ug/L	104	(70-130)		
LCS2	2-Butanone (MEK)		50	51.8	ug/L	104	(70-130)	20	0.0
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.92	ug/L	118	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	98.6	%	99	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	101	%	101	(70-130)		
MBLK	4-Bromofluorobenzene (S)			93.2	%	93	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	4-Bromofluorobenzene (S)		5	96.6	%	97	(70-130)		
MRL_W	4-Bromofluorobenzene (S)		5	98.2	%	98	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	48.2	ug/L	96	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	47.8	ug/L	96	(70-130)	20	0.83
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.20	ug/L	84	(50-150)		
LCS1	Benzene		5	5.01	ug/L	100	(70-130)		
LCS2	Benzene		5	4.77	ug/L	95	(70-130)	20	4.9
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Bromobenzene		5	4.74	ug/L	95	(70-130)		
LCS2	Bromobenzene		5	4.62	ug/L	92	(70-130)	20	2.6
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.440	ug/L	88	(50-150)		
LCS1	Bromochloromethane		5	4.80	ug/L	96	(70-130)		
LCS2	Bromochloromethane		5	4.85	ug/L	97	(70-130)	20	1.0
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	Bromodichloromethane		5	4.67	ug/L	93	(70-130)		
LCS2	Bromodichloromethane		5	4.63	ug/L	93	(70-130)	20	0.86
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	Bromoethane		5	4.95	ug/L	99	(70-130)		
LCS2	Bromoethane		5	5.26	ug/L	105	(70-130)	20	6.1
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Bromoform		5	4.17	ug/L	83	(70-130)		
LCS2	Bromoform		5	3.91	ug/L	78	(70-130)	20	6.4
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.380	ug/L	76	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.22	ug/L	104	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.64	ug/L	113	(70-130)	20	7.7
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.540	ug/L	108	(50-150)		
LCS1	Carbon disulfide		5	4.79	ug/L	96	(70-130)		
LCS2	Carbon disulfide		5	4.63	ug/L	93	(70-130)	20	3.4
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.440	ug/L	88	(50-150)		

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Carbon Tetrachloride		5	3.92	ug/L	78	(70-130)		
LCS2	Carbon Tetrachloride		5	4.02	ug/L	80	(70-130)	20	2.5
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.430	ug/L	86	(50-150)		
LCS1	Chlorobenzene		5	4.58	ug/L	92	(70-130)		
LCS2	Chlorobenzene		5	4.46	ug/L	89	(70-130)	20	2.6
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.370	ug/L	74	(50-150)		
LCS1	Chlorodibromomethane		5	4.59	ug/L	92	(70-130)		
LCS2	Chlorodibromomethane		5	4.64	ug/L	93	(70-130)	20	1.1
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.450	ug/L	90	(50-150)		
LCS1	Chloroethane		5	4.68	ug/L	94	(70-130)		
LCS2	Chloroethane		5	5.19	ug/L	104	(70-130)	20	10
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.72	ug/L	94	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	4.74	ug/L	95	(70-130)	20	0.42
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.66	ug/L	93	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.90	ug/L	98	(70-130)	20	5.0
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.640	ug/L	128	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	5.10	ug/L	102	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.90	ug/L	98	(70-130)	20	4.0
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.510	ug/L	102	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.30	ug/L	86	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.33	ug/L	87	(70-130)	20	0.70
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.410	ug/L	82	(50-150)		
LCS1	Dibromomethane		5	4.93	ug/L	99	(70-130)		
LCS2	Dibromomethane		5	4.60	ug/L	92	(70-130)	20	6.9
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	Dichlorodifluoromethane		5	4.90	ug/L	98	(70-130)		
LCS2	Dichlorodifluoromethane		5	4.64	ug/L	93	(70-130)	20	5.5

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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Dichloromethane		5	4.94	ug/L	99	(70-130)		
LCS2	Dichloromethane		5	4.78	ug/L	96	(70-130)	20	3.3
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.680	ug/L	136	(50-150)		
LCS1	Di-isopropyl ether		5	5.12	ug/L	102	(70-130)		
LCS2	Di-isopropyl ether		5	5.11	ug/L	102	(70-130)	20	0.20
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.520	ug/L	104	(50-150)		
LCS1	Ethyl benzene		5	4.69	ug/L	94	(70-130)		
LCS2	Ethyl benzene		5	4.65	ug/L	93	(70-130)	20	0.86
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.400	ug/L	80	(50-150)		
LCS1	Hexachlorobutadiene		5	4.33	ug/L	87	(70-130)		
LCS2	Hexachlorobutadiene		5	4.72	ug/L	94	(70-130)	20	8.6
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.520	ug/L	104	(50-150)		
LCS1	Isopropylbenzene		5	4.88	ug/L	98	(70-130)		
LCS2	Isopropylbenzene		5	4.63	ug/L	93	(70-130)	20	5.3
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	m,p-Xylenes		10	9.47	ug/L	95	(70-130)		
LCS2	m,p-Xylenes		10	9.58	ug/L	96	(70-130)	20	1.1
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.730	ug/L	73	(50-150)		
MRLLW	m,p-Xylenes		0.5	0.420	ug/L	84	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.75	ug/L	95	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	4.61	ug/L	92	(70-130)	20	3.0
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.410	ug/L	82	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	4.89	ug/L	98	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	4.83	ug/L	97	(70-130)	20	1.2
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.660	ug/L	132	(50-150)		
LCS1	Naphthalene		5	4.30	ug/L	86	(70-130)		
LCS2	Naphthalene		5	4.60	ug/L	92	(70-130)	20	6.7
MBLK	Naphthalene			<0.5	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 898631  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Naphthalene		0.5	0.390	ug/L	78	(50-150)		
LCS1	n-Butylbenzene		5	4.45	ug/L	89	(70-130)		
LCS2	n-Butylbenzene		5	4.50	ug/L	90	(70-130)	20	1.1
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.440	ug/L	88	(50-150)		
LCS1	n-Propylbenzene		5	4.64	ug/L	93	(70-130)		
LCS2	n-Propylbenzene		5	4.58	ug/L	92	(70-130)	20	1.3
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.460	ug/L	92	(50-150)		
LCS1	o-Chlorotoluene		5	4.70	ug/L	94	(70-130)		
LCS2	o-Chlorotoluene		5	4.61	ug/L	92	(70-130)	20	1.9
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.410	ug/L	82	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.59	ug/L	92	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	4.66	ug/L	93	(70-130)	20	1.5
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.460	ug/L	92	(50-150)		
LCS1	o-Xylene		5	4.75	ug/L	95	(70-130)		
LCS2	o-Xylene		5	4.48	ug/L	90	(70-130)	20	5.8
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.390	ug/L	78	(50-150)		
LCS1	p-Chlorotoluene		5	4.69	ug/L	94	(70-130)		
LCS2	p-Chlorotoluene		5	4.61	ug/L	92	(70-130)	20	1.7
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.400	ug/L	80	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	4.71	ug/L	94	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	4.47	ug/L	89	(70-130)	20	5.2
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.420	ug/L	84	(50-150)		
LCS1	p-Isopropyltoluene		5	4.65	ug/L	93	(70-130)		
LCS2	p-Isopropyltoluene		5	4.45	ug/L	89	(70-130)	20	4.4
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.390	ug/L	78	(50-150)		
LCS1	sec-Butylbenzene		5	5.13	ug/L	103	(70-130)		
LCS2	sec-Butylbenzene		5	5.04	ug/L	101	(70-130)	20	1.8
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	Styrene		5	4.89	ug/L	98	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 898631  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Styrene		5	4.80	ug/L	96	(70-130)	20	1.9
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.380	ug/L	76	(50-150)		
LCS1	tert-amyl Methyl Ether		5	4.11	ug/L	82	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.22	ug/L	84	(70-130)	20	2.6
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.430	ug/L	86	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	4.62	ug/L	92	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	4.49	ug/L	90	(70-130)	20	2.9
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.490	ug/L	98	(50-150)		
LCS1	tert-Butylbenzene		5	4.65	ug/L	93	(70-130)		
LCS2	tert-Butylbenzene		5	4.44	ug/L	89	(70-130)	20	4.6
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.62	ug/L	92	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.34	ug/L	87	(70-130)	20	6.3
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.460	ug/L	92	(50-150)		
LCS1	Toluene		5	4.86	ug/L	97	(70-130)		
LCS2	Toluene		5	4.69	ug/L	94	(70-130)	20	3.6
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Toluene-d8 (S)		5	103	%	103	(70-130)		
LCS2	Toluene-d8 (S)		5	102	%	102	(70-130)		
MBLK	Toluene-d8 (S)			92.8	%	93	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	96.6	%	97	(70-130)		
MRLLLW	Toluene-d8 (S)		5	96.6	%	97	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.98	ug/L	100	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	5.04	ug/L	101	(70-130)	20	1.2
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.430	ug/L	86	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.51	ug/L	90	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.48	ug/L	90	(70-130)	20	0.67
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.400	ug/L	80	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.68	ug/L	94	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.60	ug/L	92	(70-130)	20	1.7

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 898631  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.430	ug/L	86	(50-150)		
LCS1	Trichlorofluoromethane		5	4.65	ug/L	93	(70-130)		
LCS2	Trichlorofluoromethane		5	4.59	ug/L	92	(70-130)	20	1.3
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	5.14	ug/L	103	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	5.22	ug/L	104	(70-130)	20	1.5
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.540	ug/L	108	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.58	ug/L	92	(70-130)		
LCS2	Vinyl chloride (VC)		5	4.58	ug/L	92	(70-130)	20	0.0
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.520	ug/L	104	(50-150)		
MRLCW	Vinyl chloride (VC)		0.25	0.310	ug/L	124	(50-150)		

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1283454

Analysis Date: 10/23/2020

LCS1	Hexavalent chromium(Dissolved)		2	1.97	ug/L	98	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.99	ug/L	99	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0131	ug/L	66	(50-150)		
MS_202010150296	Hexavalent chromium(Dissolved)	0.41	2	2.43	ug/L	101	(90-110)		
MSD_202010150296	Hexavalent chromium(Dissolved)	0.41	2	2.43	ug/L	101	(90-110)	20	0.091

Total Organic Carbon by SM 5310C

Analytical Batch: 1284012

Analysis Date: 10/27/2020

LCS1	Total Organic Carbon		5	5.30	mg/L	106	(90-110)		
LCS2	Total Organic Carbon		5	5.24	mg/L	105	(90-110)	20	0.95
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.243	mg/L	121	(50-150)		
MS_202010150257	Total Organic Carbon	2.7	4	6.94	mg/L	106	(80-120)		
MS2_202010150307	Total Organic Carbon	0.22	2	2.34	mg/L	106	(80-120)		
MSD_202010150257	Total Organic Carbon	2.7	4	6.96	mg/L	106	(80-120)	20	0.39
MSD2_202010150307	Total Organic Carbon	0.22	2	2.36	mg/L	107	(80-120)	20	0.72

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 10/29/2020

Quant Report - Page 1 of 1

, Tel Fax



**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 10/29/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 10/29/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Total Coliform Large, E. Coli Small, E. Coli Large), MPN/100 mL (Total Coliform, E. Coli), Presence/Absence (P/A)\* (Total Coliform, E. Coli)

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 10/29/2020

Quant Report - Page 1 of 1

, Tel Fax

## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-41273-1  
Client Project/Site: 898631

For:  
Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:  
10/22/2020 4:49:23 PM

Lori Thompson, Project Manager I  
(714)895-5494  
[Lori.Thompson@eurofinset.com](mailto:Lori.Thompson@eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 898631

Job ID: 570-41273-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 898631

Job ID: 570-41273-1

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**Job ID: 570-41273-1**

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**Laboratory: Eurofins Calscience LLC**

## Narrative

**Job Narrative**  
**570-41273-1**

### Comments

No additional comments.

### Receipt

The sample was received on 10/16/2020 10:30 AM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.9° C.

### GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

### Organic Prep

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-102836.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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# Detection Summary

Client: Eurofins Eaton Analytical  
Project/Site: 898631

Job ID: 570-41273-1

**Client Sample ID: 202010150628**

**Lab Sample ID: 570-41273-1**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 898631

Job ID: 570-41273-1

## General Chemistry

**Client Sample ID: 202010150628**

**Date Collected: 10/15/20 09:50**

**Date Received: 10/16/20 10:40**

**Lab Sample ID: 570-41273-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.982	0.786	mg/L		10/19/20 10:02	10/20/20 17:25	1

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# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 898631

Job ID: 570-41273-1

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 570-102836/1-A**  
**Matrix: Water**  
**Analysis Batch: 103290**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 102836**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		10/19/20 10:02	10/20/20 17:25	1

**Lab Sample ID: LCS 570-102836/2-A**  
**Matrix: Water**  
**Analysis Batch: 103290**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 102836**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	37.40		mg/L		93	78 - 114

**Lab Sample ID: LCSD 570-102836/3-A**  
**Matrix: Water**  
**Analysis Batch: 103290**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 102836**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	37.40		mg/L		93	78 - 114	0	18

# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 898631

Job ID: 570-41273-1

## General Chemistry

### Prep Batch: 102836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-41273-1	202010150628	Total/NA	Water	1664A	
MB 570-102836/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-102836/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-102836/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

### Analysis Batch: 103290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-41273-1	202010150628	Total/NA	Water	1664A	102836
MB 570-102836/1-A	Method Blank	Total/NA	Water	1664A	102836
LCS 570-102836/2-A	Lab Control Sample	Total/NA	Water	1664A	102836
LCSD 570-102836/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	102836

# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 898631

Job ID: 570-41273-1

**Client Sample ID: 202010150628**

**Lab Sample ID: 570-41273-1**

**Date Collected: 10/15/20 09:50**

**Matrix: Water**

**Date Received: 10/16/20 10:40**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1018 mL	1000 mL	102836	10/19/20 10:02	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			103290	10/20/20 17:25	L6IE	ECL 1

Instrument ID: NOEQUIP

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 898631

Job ID: 570-41273-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-30-21
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-30-21
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-21

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# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 898631

Job ID: 570-41273-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

**Protocol References:**

1664A = EPA-821-98-002

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 898631

Job ID: 570-41273-1

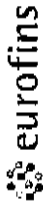
---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-41273-1	202010150628	Water	10/15/20 09:50	10/16/20 10:40	

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Eaton Analytical

**Ship To:**

**Eurofins CalScience**  
7440 Lincoln Way

**Garden Grove, CA 92641-1432**

Phone: 714-895-5494 Fax: 714-894-7501

**Folder #:** 898631  
**Report Due:** 10/29/2020

**41273**  
**Date:** 10/16/2020

**Submittal Form**

**\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!**  
Report & Invoice must have the Folder # 898631 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report.  
Results must have Complete data & QC with Approval Signature

**Reports:** Jackie Contreras Sub-Contracting Administrator  
EMAIL TO: Eaton-MonroviaSubContract@eurofins.com  
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
Phone (626) 386-1165 Fax (626) 386-1122  
Invoices to: Eurofins Eaton Analytical, LLC  
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the  
Specified State Certification # and  
Exp Date for requested tests + matrix  
Samples from: CALIFORNIA

**Client Sample ID for reference on!**

LH-INF-20201015

**Sample ID** 202010150628  
**Sample type:** LH-INF-20201015  
**Sample Event:** Oil and Grease by 1664(subbed)

**Sample Date & Time Matrix** 10/15/20 0950 DW  
**PWS Systemcode** PWSID  
**Static ID:** JLS

**Method** EPA 1664  
**Prep Method** Analysis Requested  
**Facility ID:** Sample Point ID:



570-41273 Chain of Custody

**Relinquished by:** Xin Sample Control Date 10/16/20 Time 1030  
**Received by:** Imay Date 10/16/20 Time 1040  
**Relinquished by:** \_\_\_\_\_ Sample Control Date \_\_\_\_\_ Time \_\_\_\_\_  
**Received by:** \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgment of Receipt is requested to: atri, Jackie Contreras

2-7/11-956

# Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-41273-1

**Login Number: 41273**

**List Number: 1**

**Creator: Le, Danny**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 899759  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

### STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 899759  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **October 22, 2020 at 1438**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202010220303</u>	GAC-1-20201022 Static ID: 537.1 @537.1	10/22/2020 0930
<u>202010220304</u>	GAC-2-20201022 Static ID: 537.1 @537.1	10/22/2020 0933
<u>202010220305</u>	GAC-3-20201022 Static ID: 537.1 @537.1	10/22/2020 0936
<u>202010220306</u>	GAC-4-20201022 Static ID: 537.1 @537.1	10/22/2020 0939
<u>202010220307</u>	IX-1-20201022 Static ID: 537.1 @537.1	10/22/2020 0942
<u>202010220308</u>	IX-2-20201022 Static ID: 537.1 @537.1	10/22/2020 0945
<u>202010220309</u>	IX-3-20201022 Static ID: 537.1 @537.1	10/22/2020 0948
<u>202010220310</u>	IX-4-20201022 Static ID: 537.1 @537.1	10/22/2020 0951
<u>202010220311</u>	GAC-5-20201022 Static ID: 537.1 @537.1	10/22/2020 1130
<u>202010220312</u>	GAC-6-20201022 Static ID: 537.1 @537.1	10/22/2020 1133
<u>202010220313</u>	GAC-7-20201022 Static ID: 537.1	10/22/2020 1136

**Acknowledgement of Samples Received**

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 899759  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **October 22, 2020 at 1438**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202010220314	GAC-8-20201022 Static ID: 537.1	10/22/2020 1139
	@537.1	
202010220315	IX-5-20201022 Static ID: 537.1	10/22/2020 1142
	@537.1	
202010220316	IX-6-20201022 Static ID: 537.1	10/22/2020 1145
	@537.1	
202010220317	IX-7-20201022 Static ID: 537.1	10/22/2020 1148
	@537.1	
202010220318	IX-8-20201022 Static ID: 537.1	10/22/2020 1151
	@537.1	

**Test Description**

@537.1 -- EPA Method 537.1



899159

FROM: GSI Environmental Inc.  
19200 Von Karman Ave, Suite 800  
Irvine, CA 92612  
(949) 679-1070

PROJECT NAME: WRD Pilot

PROJECT CONTACT: Miae Jeon

GLOBAL ID:

TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com

LABORATORY: Eurofins Eaton Analytical

PROJECT NO.: 5302

LAB CONTACT: Sophia Liang

SAMPLER(S): (PRINT)  
BC

**REQUESTED ANALYSES**

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING TIME		MATRIX	NO. OF CONT.	PRESERVATION			PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME			Unpreserved	Preserved	Field Filtered				
	GAC-1-20201022	10/22/20	930	Water	2		2		X			
	GAC-2-20201022		933	Water	↓		↓		X			
	GAC-3-20201022		936	Water	↓		↓		X			
	GAC-4-20201022		939	Water	↓		↓		X			
	IX-1-20201022		942	Water	↓		↓		X			
	IX-2-20201022		945	Water	↓		↓		X			
	IX-3-20201022		948	Water	↓		↓		X			
	IX-4-20201022		951	Water	↓		↓		X			
	<del>LH-NF</del>			<del>Water</del>					X	X		BC
	<del>LH-NF-DUP</del>			<del>Water</del>					X	X		BC
	GAC-5-20201022	10/22/20	1130	Water	2		2		X			
	GAC-6-20201022		1133	Water	↓		↓		X			
	GAC-7-20201022		1136	Water	↓		↓		X			
	GAC-8-20201022		1139	Water	↓		↓		X			

Relinquished by: (Signature) *[Signature]* Date: 10/22/2020 Time: 14:38

Relinquished by: (Signature) *[Signature]* Date: 10-22-20 Time: 1:38

Relinquished by: (Signature) *[Signature]* Date: \_\_\_\_\_ Time: \_\_\_\_\_







Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 899759  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/22/2020 1438

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/26/2020 18:08	Perfluorohexanoic acid (PFHxA)	<b>202010220307</b> <u><b>IX-1-20201022</b></u>	0.0024		ug/L	0.0020
10/26/2020 18:27	Perfluorohexanoic acid (PFHxA)	<b>202010220308</b> <u><b>IX-2-20201022</b></u>	0.0040		ug/L	0.0020
10/26/2020 19:25	Perfluorohexanoic acid (PFHxA)	<b>202010220309</b> <u><b>IX-3-20201022</b></u>	0.0040		ug/L	0.0020
10/26/2020 19:34	Perfluorohexanoic acid (PFHxA)	<b>202010220310</b> <u><b>IX-4-20201022</b></u>	0.0040		ug/L	0.0020
10/26/2020 19:44	Perfluorobutanesulfonic acid (PFBS)	<b>202010220311</b> <u><b>GAC-5-20201022</b></u>	0.0078		ug/L	0.0020
10/26/2020 19:44	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
10/26/2020 19:44	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020
10/26/2020 19:44	Perfluorooctanesulfonic acid (PFOS)		0.0037		ug/L	0.0020
10/26/2020 19:44	Perfluorooctanoic acid (PFOA)		0.0069		ug/L	0.0020
10/26/2020 19:53	Perfluorobutanesulfonic acid (PFBS)	<b>202010220312</b> <u><b>GAC-6-20201022</b></u>	0.014		ug/L	0.0020
10/26/2020 19:53	Perfluorohexanoic acid (PFHxA)		0.0097		ug/L	0.0020
10/26/2020 20:14	Perfluorobutanesulfonic acid (PFBS)	<b>202010220313</b> <u><b>GAC-7-20201022</b></u>	0.010		ug/L	0.0020
10/26/2020 20:14	Perfluoroheptanoic acid (PFHpA)		0.0033		ug/L	0.0020
10/26/2020 20:14	Perfluorohexanoic acid (PFHxA)		0.0077		ug/L	0.0020
10/26/2020 20:14	Perfluorooctanoic acid (PFOA)		0.0048		ug/L	0.0020
10/26/2020 20:25	Perfluorobutanesulfonic acid (PFBS)	<b>202010220314</b> <u><b>GAC-8-20201022</b></u>	0.0034		ug/L	0.0020
10/26/2020 20:25	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
10/26/2020 20:34	Perfluorohexanoic acid (PFHxA)	<b>202010220315</b> <u><b>IX-5-20201022</b></u>	0.0046		ug/L	0.0020
10/26/2020 20:44	Perfluorohexanoic acid (PFHxA)	<b>202010220316</b> <u><b>IX-6-20201022</b></u>	0.0068		ug/L	0.0020
10/26/2020 20:54	Perfluoroheptanoic acid (PFHpA)	<b>202010220317</b> <u><b>IX-7-20201022</b></u>	0.0038		ug/L	0.0020
10/26/2020 20:54	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020
10/26/2020 20:54	Perfluorooctanoic acid (PFOA)		0.0025		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
Fax: (626) 988-3757  
1 800 566 LABS (1 800 566 5227)

Report: 899759  
Project: 0250000  
Group: WRD Pilot [Set #2]

**Water Replenishment District**  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

Samples Received on:  
10/22/2020 1438

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	<b>202010220318</b>	<b><u>IX-8-20201022</u></b>				
10/26/2020 21:03	Perfluoroheptanoic acid (PFHpA)		0.0026		ug/L	0.0020
10/26/2020 21:03	Perfluorohexanoic acid (PFHxA)		0.0070		ug/L	0.0020

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20201022 (202010220303)</b>					<b>Sampled on 10/22/2020 0930</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	13C2-PFDA	99	%		1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	13C2-PFHxA	109	%		1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	13C3-HFPO-DA	98	%		1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	d3-NMeFOSAA	97	%		1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	d5-NEtFOSAA	88	%		1

<b>GAC-2-20201022 (202010220304)</b>					<b>Sampled on 10/22/2020 0933</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	13C2-PFDA	91	%		1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	13C2-PFHxA	100	%		1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	13C3-HFPO-DA	89	%		1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	d3-NMeFOSAA	90	%		1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	d5-NEtFOSAA	86	%		1

**GAC-3-20201022 (202010220305)**

Sampled on 10/22/2020 0936

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.

(c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	13C2-PFDA	93	%		1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	13C2-PFHxA	97	%		1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	95	%		1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	107	%		1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	85	%		1

**GAC-4-20201022 (202010220306)**

Sampled on 10/22/2020 0939

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.

(c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	13C2-PFDA	90	%		1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	13C2-PFHxA	98	%		1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	94	%		1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	106	%		1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	81	%		1

**IX-1-20201022 (202010220307)**

Sampled on 10/22/2020 0942

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	13C2-PFDA	90	%		1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	13C2-PFHxA	94	%		1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	94	%		1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	109	%		1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	79	%		1

**IX-2-20201022 (202010220308)**

**Sampled on 10/22/2020 0945**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	13C2-PFDA	93	%		1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	13C2-PFHxA	98	%		1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	92	%		1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	109	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	84	%		1
<b>IX-3-20201022 (202010220309)</b>						<b>Sampled on 10/22/2020 0948</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	13C2-PFDA	90	%		1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	13C2-PFHxA	98	%		1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	94	%		1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	105	%		1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	81	%		1

<b>IX-4-20201022 (202010220310)</b>						<b>Sampled on 10/22/2020 0951</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	13C2-PFDA	90	%		1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	13C2-PFHxA	98	%		1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	95	%		1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	104	%		1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	d5-NETFOSAA	84	%		1

**GAC-5-20201022 (202010220311)**

Sampled on 10/22/2020 1130

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0078	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0037	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0069	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	13C2-PFDA	93	%		1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	13C2-PFHxA	98	%		1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	93	%		1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	104	%		1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	82	%		1

**GAC-6-20201022 (202010220312)**

Sampled on 10/22/2020 1133

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.014	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0097	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	13C2-PFDA	91	%		1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	13C2-PFHxA	95	%		1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	93	%		1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	103	%		1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	83	%		1

**GAC-7-20201022 (202010220313)**

Sampled on 10/22/2020 1136

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0077	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0048	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	13C2-PFDA	94	%		1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	13C2-PFHxA	97	%		1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	95	%		1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	94	%		1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	85	%		1

**GAC-8-20201022 (202010220314)**

Sampled on 10/22/2020 1139

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0034	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	13C2-PFDA	88	%		1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	13C2-PFHxA	94	%		1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	92	%		1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	94	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	80	%		1
<b>IX-5-20201022 (202010220315)</b>					<b>Sampled on 10/22/2020 1142</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	13C2-PFDA	88	%		1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	13C2-PFHxA	101	%		1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	97	%		1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	78	%		1

**IX-6-20201022 (202010220316)**

**Sampled on 10/22/2020 1145**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	13C2-PFDA	91	%		1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	13C2-PFHxA	98	%		1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	96	%		1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	83	%		1

**IX-7-20201022 (202010220317)**

Static ID: 537.1

**Sampled on 10/22/2020 1148**

**EPA 537.1 - EPA Method 537.1**

10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0038	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0025	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	13C2-PFDA	88	%		1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	13C2-PFHxA	99	%		1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	95	%		1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	94	%		1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	d5-NeFOSAA	81	%		1

**IX-8-20201022 (202010220318)**

Sampled on 10/22/2020 1151

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0026	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0070	ug/L	0.0020	1

Rounding on totals after summation.

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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

**Report:** 899759  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	13C2-PFDA	87	%		1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	13C2-PFHxA	97	%		1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	96	%		1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	91	%		1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	79	%		1

Rounding on totals after summation.  
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**Report:** 899759  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

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**EPA Method 537.1****Prep Batch: 1283169 Analytical Batch: 1284020**

202010220303                    GAC-1-20201022  
202010220304                    GAC-2-20201022

**Analysis Date: 10/26/2020**

Analyzed by: SZZ

Analyzed by: SZZ

**EPA Method 537.1****Prep Batch: 1283240 Analytical Batch: 1284024**

202010220305                    GAC-3-20201022  
202010220306                    GAC-4-20201022  
202010220307                    IX-1-20201022  
202010220308                    IX-2-20201022  
202010220309                    IX-3-20201022  
202010220310                    IX-4-20201022  
202010220311                    GAC-5-20201022  
202010220312                    GAC-6-20201022  
202010220313                    GAC-7-20201022  
202010220314                    GAC-8-20201022  
202010220315                    IX-5-20201022  
202010220316                    IX-6-20201022  
202010220317                    IX-7-20201022  
202010220318                    IX-8-20201022

**Analysis Date: 10/26/2020**

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>EPA Method 537.1 by EPA 537.1</b>									
<b>Prep Batch: 1283169 Analytical Batch: 1284020</b>					<b>Analysis Date: 10/26/2020</b>				
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0219	ug/L	93	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0231	ug/L	98	(70-130)	30	5.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00177	ug/L	94	(50-150)		
MS_202010220027	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00184	ug/L	98	(50-150)		
MSD_202010220027	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00186	ug/L	99	(50-150)	50	0.85
LCS1	13C2-PFDA (S)		100	95.7	%	96	(70-130)		
LCS2	13C2-PFDA (S)		100	91.2	%	91	(70-130)		
MBLK	13C2-PFDA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	99.8	%	100	(70-130)		
MS_202010220027	13C2-PFDA (S)		100	93.1	%	93	(70-130)		
MSD_202010220027	13C2-PFDA (S)		100	96.8	%	97	(70-130)		
LCS1	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS2	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFHxA (S)			114	%	114	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	113	%	113	(70-130)		
MS_202010220027	13C2-PFHxA (S)		100	104	%	104	(70-130)		
MSD_202010220027	13C2-PFHxA (S)		100	106	%	106	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	91.0	%	91	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	92.4	%	92	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			93.1	%	93	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	92.2	%	92	(50-150)		
MS_202010220027	13C2-PFOA- IS#1 (I)		100	93.4	%	93	(50-150)		
MSD_202010220027	13C2-PFOA- IS#1 (I)		100	94.7	%	95	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	99.7	%	100	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	98.9	%	99	(70-130)		
MBLK	13C3-HFPO-DA (S)			100	%	100	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	100	%	100	(70-130)		
MS_202010220027	13C3-HFPO-DA (S)		100	91.7	%	92	(70-130)		
MSD_202010220027	13C3-HFPO-DA (S)		100	96.1	%	96	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	97.6	%	98	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	96.7	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			97.5	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	97.2	%	97	(50-150)		
MS_202010220027	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202010220027	13C4-PFOS- IS#2 (I)		100	98.1	%	98	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0286	ug/L	121	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0276	ug/L	117	(70-130)	30	3.6
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00225	ug/L	119	(50-150)		
MS_202010220027	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00223	ug/L	118	(50-150)		
MSD_202010220027	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00221	ug/L	117	(50-150)	50	0.82
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0248	ug/L	106	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0253	ug/L	109	(70-130)	30	2.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00195	ug/L	105	(50-150)		
MS_202010220027	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00203	ug/L	109	(50-150)		
MSD_202010220027	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00202	ug/L	108	(50-150)	50	0.47
LCS1	d3-NMeFOSAA (I)		100	84.4	%	84	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	85.4	%	85	(50-150)		
MBLK	d3-NMeFOSAA (I)			96.7	%	97	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	95.5	%	95	(50-150)		
MS_202010220027	d3-NMeFOSAA (I)		100	93.5	%	93	(50-150)		
MSD_202010220027	d3-NMeFOSAA (I)		100	94.8	%	95	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	88.7	%	89	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	88.1	%	88	(70-130)		
MBLK	d5-NEtFOSAA (S)			88.7	%	89	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	89.4	%	89	(70-130)		
MS_202010220027	d5-NEtFOSAA (S)		100	85.0	%	85	(70-130)		
MSD_202010220027	d5-NEtFOSAA (S)		100	91.2	%	91	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0275	ug/L	110	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0283	ug/L	113	(70-130)	30	2.9
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202010220027	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202010220027	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00219	ug/L	110	(50-150)	50	1.6
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0274	ug/L	110	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0272	ug/L	109	(70-130)	30	0.73
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00218	ug/L	109	(50-150)		
MS_202010220027	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00207	ug/L	103	(50-150)		
MSD_202010220027	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00212	ug/L	106	(50-150)	50	2.5
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0270	ug/L	108	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0266	ug/L	106	(70-130)	30	1.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00216	ug/L	108	(50-150)		
MS_202010220027	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00224	ug/L	110	(50-150)		
MSD_202010220027	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00214	ug/L	105	(50-150)	50	4.5
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0247	ug/L	112	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0251	ug/L	113	(70-130)	30	1.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00203	ug/L	115	(50-150)		
MS_202010220027	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00202	ug/L	114	(50-150)		
MSD_202010220027	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00206	ug/L	116	(50-150)	50	2.0
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0270	ug/L	108	(70-130)	30	4.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202010220027	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00227	ug/L	111	(50-150)		
MSD_202010220027	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00228	ug/L	111	(50-150)	50	0.50
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0273	ug/L	109	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0261	ug/L	104	(70-130)	30	4.5
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202010220027	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00229	ug/L	114	(50-150)		
MSD_202010220027	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00216	ug/L	108	(50-150)	50	5.7
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0305	ug/L	122	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0294	ug/L	118	(70-130)	30	3.3
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00253	ug/L	126	(50-150)		
MS_202010220027	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00259	ug/L	128	(50-150)		
MSD_202010220027	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00246	ug/L	122	(50-150)	50	4.9
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0253	ug/L	111	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0258	ug/L	113	(70-130)	30	2.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00212	ug/L	117	(50-150)		
MS_202010220027	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00210	ug/L	115	(50-150)		
MSD_202010220027	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00208	ug/L	114	(50-150)	50	1.2
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0305	ug/L	122	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0308	ug/L	123	(70-130)	30	0.98
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00248	ug/L	124	(50-150)		
MS_202010220027	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00261	ug/L	127	(50-150)		
MSD_202010220027	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00260	ug/L	127	(50-150)	50	0.43
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0295	ug/L	118	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0288	ug/L	115	(70-130)	30	2.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00245	ug/L	123	(50-150)		
MS_202010220027	Perfluorononanoic acid (PFNA)	ND	0.002	0.00246	ug/L	122	(50-150)		
MSD_202010220027	Perfluorononanoic acid (PFNA)	ND	0.002	0.00234	ug/L	116	(50-150)	50	4.4
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0239	ug/L	103	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0256	ug/L	111	(70-130)	30	6.9
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00205	ug/L	111	(50-150)		
MS_202010220027	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00210	ug/L	111	(50-150)		
MSD_202010220027	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00206	ug/L	108	(50-150)	50	2.0
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0294	ug/L	118	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0292	ug/L	117	(70-130)	30	0.68
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00250	ug/L	125	(50-150)		
MS_202010220027	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00250	ug/L	119	(50-150)		
MSD_202010220027	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00248	ug/L	118	(50-150)	50	0.67
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0273	ug/L	109	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0265	ug/L	106	(70-130)	30	3.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202010220027	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00228	ug/L	112	(50-150)		
MSD_202010220027	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00222	ug/L	109	(50-150)	50	2.9
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0250	ug/L	100	(70-130)	30	6.2
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00203	ug/L	101	(50-150)		
MS_202010220027	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00213	ug/L	106	(50-150)		
MSD_202010220027	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00210	ug/L	105	(50-150)	50	1.3
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0268	ug/L	107	(70-130)	30	1.5
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00226	ug/L	113	(50-150)		
MS_202010220027	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00229	ug/L	115	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202010220027	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00223	ug/L	112	(50-150)	50	2.7

EPA Method 537.1 by EPA 537.1

Prep Batch: 1283240 Analytical Batch: 1284024

Analysis Date: 10/26/2020

DUP_202010220308	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0265	ug/L	113	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0242	ug/L	103	(70-130)	30	9.1
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00210	ug/L	112	(50-150)		
MS_202010220307	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00234	ug/L	125	(50-150)		
DUP_202010220308	13C2-PFDA (S)			92.5	%	93	(70-130)		
LCS1	13C2-PFDA (S)		100	90.6	%	91	(70-130)		
LCS2	13C2-PFDA (S)		100	91.2	%	91	(70-130)		
MBLK	13C2-PFDA (S)			93.4	%	93	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	92.2	%	92	(70-130)		
MS_202010220307	13C2-PFDA (S)		100	92.9	%	93	(70-130)		
DUP_202010220308	13C2-PFHxA (S)			95.3	%	95	(70-130)		
LCS1	13C2-PFHxA (S)		100	95.2	%	95	(70-130)		
LCS2	13C2-PFHxA (S)		100	99.0	%	99	(70-130)		
MBLK	13C2-PFHxA (S)			99.1	%	99	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	95.8	%	96	(70-130)		
MS_202010220307	13C2-PFHxA (S)		100	96.7	%	97	(70-130)		
DUP_202010220308	13C2-PFOA- IS#1 (I)			100	%	100	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	99.8	%	100	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	86.6	%	87	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			99.6	%	100	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MS_202010220307	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
DUP_202010220308	13C3-HFPO-DA (S)			91.6	%	92	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	93.2	%	93	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	99.5	%	100	(70-130)		
MBLK	13C3-HFPO-DA (S)			94.8	%	95	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	93.3	%	93	(70-130)		
MS_202010220307	13C3-HFPO-DA (S)		100	92.5	%	92	(70-130)		
DUP_202010220308	13C4-PFOS- IS#2 (I)			108	%	108	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	96.7	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			104	%	104	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
MS_202010220307	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
DUP_202010220308	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0283	ug/L	120	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0288	ug/L	122	(70-130)	30	1.8
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00241	ug/L	127	(50-150)		
MS_202010220307	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00258	ug/L	137	(50-150)		
DUP_202010220308	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0260	ug/L	111	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0253	ug/L	109	(70-130)	30	2.7
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00216	ug/L	116	(50-150)		
MS_202010220307	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00226	ug/L	122	(50-150)		
DUP_202010220308	d3-NMeFOSAA (I)			105	%	105	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	80.2	%	80	(50-150)		
MBLK	d3-NMeFOSAA (I)			104	%	104	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MS_202010220307	d3-NMeFOSAA (I)		100	106	%	107	(50-150)		
DUP_202010220308	d5-NEtFOSAA (S)			83.4	%	83	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	79.3	%	79	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	83.3	%	83	(70-130)		
MBLK	d5-NEtFOSAA (S)			83.8	%	84	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	82.6	%	83	(70-130)		
MS_202010220307	d5-NEtFOSAA (S)		100	83.6	%	84	(70-130)		
DUP_202010220308	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0291	ug/L	116	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0308	ug/L	123	(70-130)	30	5.7
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00240	ug/L	120	(50-150)		
MS_202010220307	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00259	ug/L	130	(50-150)		
DUP_202010220308	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0261	ug/L	104	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0265	ug/L	106	(70-130)	30	1.5
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00216	ug/L	108	(50-150)		
MS_202010220307	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00254	ug/L	127	(50-150)		

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202010220308	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0270	ug/L	108	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0274	ug/L	110	(70-130)	30	1.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00232	ug/L	116	(50-150)		
MS_202010220307	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00257	ug/L	128	(50-150)		
DUP_202010220308	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0256	ug/L	116	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0252	ug/L	114	(70-130)	30	1.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00208	ug/L	118	(50-150)		
MS_202010220307	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00219	ug/L	124	(50-150)		
DUP_202010220308	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0287	ug/L	115	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0283	ug/L	113	(70-130)	30	1.4
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00257	ug/L	128	(50-150)		
MS_202010220307	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00279	ug/L	133	(50-150)		
DUP_202010220308	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0274	ug/L	109	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0264	ug/L	106	(70-130)	30	3.7
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202010220307	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00252	ug/L	126	(50-150)		
DUP_202010220308	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0311	ug/L	125	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0308	ug/L	123	(70-130)	30	0.97
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00265	ug/L	133	(50-150)		
MS_202010220307	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00341	ug/L	144	(50-150)		
DUP_202010220308	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0265	ug/L	116	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0258	ug/L	113	(70-130)	30	2.7
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00226	ug/L	124	(50-150)		
MS_202010220307	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00242	ug/L	132	(50-150)		
DUP_202010220308	Perfluorohexanoic acid (PFHxA)	0.0040		0.00402	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0296	ug/L	118	(70-130)		

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 899759  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0311	ug/L	124	(70-130)	30	4.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00251	ug/L	125	(50-150)		
MS_202010220307	Perfluorohexanoic acid (PFHxA)	0.0024	0.002	0.00506	ug/L	131	(50-150)		
DUP_202010220308	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0299	ug/L	120	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0301	ug/L	120	(70-130)	30	0.67
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00246	ug/L	123	(50-150)		
MS_202010220307	Perfluorononanoic acid (PFNA)	ND	0.002	0.00286	ug/L	136	(50-150)		
DUP_202010220308	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0268	ug/L	116	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0257	ug/L	111	(70-130)	30	4.2
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00220	ug/L	119	(50-150)		
MS_202010220307	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00240	ug/L	123	(50-150)		
DUP_202010220308	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0304	ug/L	122	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0295	ug/L	118	(70-130)	30	3.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00263	ug/L	131	(50-150)		
MS_202010220307	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00405	ug/L	134	(50-150)		
DUP_202010220308	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0310	ug/L	124	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0292	ug/L	117	(70-130)	30	6.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00299	ug/L	150	(50-150)		
MS_202010220307	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00332	ug/L	139	(50-150)		
DUP_202010220308	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0261	ug/L	104	(70-130)	30	7.7
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00226	ug/L	113	(50-150)		
MS_202010220307	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00256	ug/L	128	(50-150)		
DUP_202010220308	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0281	ug/L	112	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0276	ug/L	110	(70-130)	30	1.8
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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**Report:** 899759  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00239	ug/L	120	(50-150)		
MS_202010220307	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00262	ug/L	131	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 10/28/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 10/28/2020

, Tel Fax

Report of Analysis by 24-Hour Collert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Pos Tubes (Tot, E., Coli), MPN/100ml (Tot, E., Coli), Pres/Abs (P/A)\* (Tot, E., Coli)

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 10/28/2020

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Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_

Project: \_\_\_\_\_  
 Phone #: \_\_\_\_\_  
 Date Received: \_\_\_\_\_  
 Sampled By: \_\_\_\_\_  
 Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
 P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)\*

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 10/28/2020

Quant Report - Page 1 of 1

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Monrovia, California 91016-3629  
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## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 902203  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 902203  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **November 05, 2020 at 1203**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202011050476</u>	GAC-1 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0900
<u>202011050477</u>	GAC-2 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0903
<u>202011050478</u>	GAC-3 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0906
<u>202011050479</u>	GAC-4 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0909
<u>202011050480</u>	IX-1 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0912
<u>202011050481</u>	IX-2 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0915
<u>202011050482</u>	IX-3 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0918
<u>202011050483</u>	IX-4 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0921
<u>202011050514</u>	GAC-5 - 20201105 @537.1	11/05/2020 1040
<u>202011050515</u>	GAC-6 - 20201105 @537.1	11/05/2020 1043
<u>202011050516</u>	GAC-7 - 20201105 @537.1	11/05/2020 1046
<u>202011050517</u>	GAC-8 - 20201105	11/05/2020 1049

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 902203  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **November 05, 2020 at 1203**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
<u>202011050518</u>	IX-5 - 20201105	11/05/2020 1050
	@537.1	
<u>202011050519</u>	IX-6 - 20201105	11/05/2020 1053
	@537.1	
<u>202011050520</u>	IX-7 - 20201105	11/05/2020 1056
	@537.1	
<u>202011050521</u>	IX-8 - 20201105	11/05/2020 1059
	@537.1	

#### Test Description

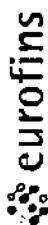
@537.1 -- EPA Method 537.1

902002

<p>FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070</p> <p>TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com</p> <p>LABORATORY: Eurofins Eaton Analytical</p>	<p>PROJECT NAME: WRD Pilot</p> <p>PROJECT CONTACT: Miae Jeon</p> <p>GLOBAL ID:</p>	<p>PROJECT NO.: 5302</p> <p>LAB CONTACT: Sophia Liang</p> <p>SAMPLER(S): (PRINT) <b>BC</b></p>	<p><b>REQUESTED ANALYSES</b></p> <p>Please check box or fill in blank as needed.</p>									
<p>TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> STANDARD</p> <p><input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD</p>												
<p><b>SPECIAL INSTRUCTIONS:</b> Send report copies to pegahvin@gsi-net.com, mjeon@gsi-net.com, &amp; rforres@gsi-net.com; Provide EDD of sample results</p>												
LAB USE ONLY	SAMPLE ID	DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrite (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
	GAC-1-20201105	11/5/20	900	Water	2				X			
	GAC-2-20201105		903	Water					X			
	GAC-3-20201105		906	Water					X			
	GAC-4-20201105		909	Water					X			
	IX-1-20201105		912	Water					X			
	IX-2-20201105		915	Water					X			
	IX-3-20201105		918	Water					X			
	IX-4-20201105		921	Water					X			
	LINE			Water					X			
	LINE-DIIP			Water					X			
	GAC-5-20201105	11/5/20	1040	Water	2				X			
	GAC-6-20201105		1043	Water					X			
	GAC-7-20201105		1046	Water					X			
	GAC-8-20201105		1049	Water					X			
Relinquished by: (Signature)						Received by: (Signature)		Date: 11/5/2020		Time: 1201		
Relinquished by: (Signature)						Received by: (Signature)		Date: 11-5-20		Time: 1203		
Relinquished by: (Signature)						Received by: (Signature)		Date:		Time:		







Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 902203

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? **Yes / No**

IR Gun ID = 6016 (Observation = 15.4 °C) (Corr. Factor = -0.3 °C) (Final = 15.1 °C)

TYPE OF ICE: Real  Synthetic  No Ice  CONDITION OF ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-in / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 - (Observation) _____ °C (Corr. Factor) _____ °C (Final) _____ °C	2 - (Observation) _____ °C (Corr. Factor) _____ °C (Final) _____ °C
3 - (Observation) _____ °C (Corr. Factor) _____ °C (Final) _____ °C	4 - (Observation) _____ °C (Corr. Factor) _____ °C (Final) _____ °C

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_  
6) Chlorine check. Manufacturer: Sensafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

7) VOA and Radon Headspace: \_\_\_\_\_

No Samples with Headspace:

Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,662), 806, SPME, @CH, 632LCMS, 656, 636, Anatoxin, LCMS methods using 40 ml vials, international clients:

Samp ID	Bottle #	Nonal<6	>6mm	Samp ID	Bottle #	Nonal<6	>6mm

Note Sample IDs which have dissimilar headspace. (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: Chunfeng SIGNATURE: Chunfeng COMPANY/TITLE: Eurofins Eaton Analytical DATE: 11-5-20 TIME: 1203

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 902203  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202011050480      <u>IX-1 - 20201105</u></b>						
11/09/2020 20:39	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
11/09/2020 20:39	Perfluorooctanoic acid (PFOA)		0.0025		ug/L	0.0020
<b>202011050481      <u>IX-2 - 20201105</u></b>						
11/09/2020 20:49	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
<b>202011050482      <u>IX-3 - 20201105</u></b>						
11/09/2020 20:58	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
<b>202011050483      <u>IX-4 - 20201105</u></b>						
11/09/2020 21:08	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
<b>202011050514      <u>GAC-5 - 20201105</u></b>						
11/09/2020 21:17	Perfluorobutanesulfonic acid (PFBS)		0.0091		ug/L	0.0020
11/09/2020 21:17	Perfluoroheptanoic acid (PFHpA)		0.0035		ug/L	0.0020
11/09/2020 21:17	Perfluorohexanesulfonic acid (PFHxS)		0.0020		ug/L	0.0020
11/09/2020 21:17	Perfluorohexanoic acid (PFHxA)		0.0076		ug/L	0.0020
11/09/2020 21:17	Perfluorooctanesulfonic acid (PFOS)		0.0041		ug/L	0.0020
11/09/2020 21:17	Perfluorooctanoic acid (PFOA)		0.0075		ug/L	0.0020
<b>202011050515      <u>GAC-6 - 20201105</u></b>						
11/09/2020 21:27	Perfluorobutanesulfonic acid (PFBS)		0.016		ug/L	0.0020
11/09/2020 21:27	Perfluorohexanoic acid (PFHxA)		0.011		ug/L	0.0020
<b>202011050516      <u>GAC-7 - 20201105</u></b>						
11/09/2020 21:37	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
11/09/2020 21:37	Perfluoroheptanoic acid (PFHpA)		0.0036		ug/L	0.0020
11/09/2020 21:37	Perfluorohexanoic acid (PFHxA)		0.0080		ug/L	0.0020
11/09/2020 21:37	Perfluorooctanoic acid (PFOA)		0.0056		ug/L	0.0020
<b>202011050517      <u>GAC-8 - 20201105</u></b>						
11/09/2020 21:46	Perfluorobutanesulfonic acid (PFBS)		0.0049		ug/L	0.0020
11/09/2020 21:46	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
<b>202011050518      <u>IX-5 - 20201105</u></b>						
11/10/2020 03:27	Perfluorohexanoic acid (PFHxA)		0.0046		ug/L	0.0020
11/10/2020 03:27	Perfluorooctanoic acid (PFOA)		0.0021		ug/L	0.0020
<b>202011050519      <u>IX-6 - 20201105</u></b>						
11/10/2020 03:37	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
11/10/2020 03:37	Perfluorohexanoic acid (PFHxA)		0.0064		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

**Report:** 902203  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202011050520</b>	<b><u>IX-7 - 20201105</u></b>			
11/10/2020 03:47	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
11/10/2020 03:47	Perfluorohexanoic acid (PFHxA)		0.0067		ug/L	0.0020
11/10/2020 03:47	Perfluorooctanoic acid (PFOA)		0.0031		ug/L	0.0020
		<b>202011050521</b>	<b><u>IX-8 - 20201105</u></b>			
11/10/2020 03:56	Perfluoroheptanoic acid (PFHpA)		0.0029		ug/L	0.0020
11/10/2020 03:56	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020

Tel: (626) 386-1100  
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Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1 - 20201105 (202011050476)</b>						<b>Sampled on 11/05/2020 0900</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	13C2-PFDA	98	%		1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	13C2-PFHxA	105	%		1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	97	%		1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	98	%		1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	95	%		1

<b>GAC-2 - 20201105 (202011050477)</b>						<b>Sampled on 11/05/2020 0903</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	13C2-PFDA	98	%		1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	13C2-PFHxA	109	%		1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	96	%		1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	98	%		1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**GAC-3 - 20201105 (202011050478)**

Sampled on 11/05/2020 0906

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	13C2-PFDA	102	%		1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	13C2-PFHxA	113	%		1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	89	%		1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	102	%		1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	95	%		1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	d5-NeFOSAA	97	%		1

**GAC-4 - 20201105 (202011050479)**

Sampled on 11/05/2020 0909

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	13C2-PFDA	102	%		1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	13C2-PFHxA	110	%		1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	89	%		1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	102	%		1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	96	%		1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	94	%		1

**IX-1 - 20201105 (202011050480)**

Static ID: 537.1

Sampled on 11/05/2020 0912

**EPA 537.1 - EPA Method 537.1**

11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0025	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUNA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	13C2-PFDA	101	%		1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	13C2-PFHxA	108	%		1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	91	%		1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	101	%		1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	94	%		1

**IX-2 - 20201105 (202011050481)**

**Sampled on 11/05/2020 0915**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	13C2-PFDA	94	%		1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	13C2-PFHxA	103	%		1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	97	%		1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	97	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	94	%		1
<b>IX-3 - 20201105 (202011050482)</b>						<b>Sampled on 11/05/2020 0918</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	13C2-PFDA	99	%		1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	13C2-PFHxA	105	%		1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	91	%		1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	96	%		1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	98	%		1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**IX-4 - 20201105 (202011050483)**

**Sampled on 11/05/2020 0921**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	13C2-PFDA	102	%		1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	13C2-PFHxA	105	%		1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	91	%		1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	100	%		1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**GAC-5 - 20201105 (202011050514)**

Sampled on 11/05/2020 1040

**EPA 537.1 - EPA Method 537.1**

11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0091	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0035	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0020	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0076	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0041	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0075	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	13C2-PFDA	101	%		1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	13C2-PFHxA	106	%		1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	98	%		1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	d5-NeFOSAA	94	%		1

**GAC-6 - 20201105 (202011050515)**

Sampled on 11/05/2020 1043

**EPA 537.1 - EPA Method 537.1**

11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.016	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.011	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	13C2-PFDA	100	%		1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	13C2-PFHxA	109	%		1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	91	%		1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	99	%		1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	96	%		1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	96	%		1

**GAC-7 - 20201105 (202011050516)**

Sampled on 11/05/2020 1046

**EPA 537.1 - EPA Method 537.1**

11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0036	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0080	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0056	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	13C2-PFDA	97	%		1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	13C2-PFHxA	104	%		1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	98	%		1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	96	%		1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	96	%		1

**GAC-8 - 20201105 (202011050517)**

**Sampled on 11/05/2020 1049**

**EPA 537.1 - EPA Method 537.1**

11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0049	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	13C2-PFDA	99	%		1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	13C2-PFHxA	105	%		1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	94	%		1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	97	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	95	%		1
<b>IX-5 - 20201105 (202011050518)</b>					<b>Sampled on 11/05/2020 1050</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0021	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	13C2-PFDA	94	%		1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	13C2-PFHxA	96	%		1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	13C3-HFPO-DA	95	%		1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**IX-6 - 20201105 (202011050519)**

**Sampled on 11/05/2020 1053**

**EPA 537.1 - EPA Method 537.1**

11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	13C2-PFDA	92	%		1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	13C2-PFHxA	94	%		1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	13C3-HFPO-DA	91	%		1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	d3-NMeFOSAA	100	%		1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**IX-7 - 20201105 (202011050520)**

Sampled on 11/05/2020 1056

**EPA 537.1 - EPA Method 537.1**

11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0067	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0031	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	13C2-PFDA	100	%		1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	13C2-PFHxA	96	%		1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	13C3-HFPO-DA	96	%		1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**IX-8 - 20201105 (202011050521)**

**Sampled on 11/05/2020 1059**

**EPA 537.1 - EPA Method 537.1**

11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0029	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1

Rounding on totals after summation.  
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**Report:** 902203  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	13C2-PFDA	95	%		1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	13C2-PFHxA	96	%		1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	13C3-HFPO-DA	96	%		1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	d3-NMeFOSAA	101	%		1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	d5-NEtFOSAA	88	%		1

Rounding on totals after summation.  
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Report: 902203  
Project: 0250000  
Group: WRD Pilot [Set #2]

Water Replenishment District

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**EPA Method 537.1**

**Prep Batch: 1286664 Analytical Batch: 1287084**

202011050518	IX-5 - 20201105
202011050519	IX-6 - 20201105
202011050520	IX-7 - 20201105
202011050521	IX-8 - 20201105

**Analysis Date: 11/10/2020**

Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ

**EPA Method 537.1**

**Prep Batch: 1286328 Analytical Batch: 1287138**

202011050476	GAC-1 - 20201105
202011050477	GAC-2 - 20201105
202011050478	GAC-3 - 20201105
202011050479	GAC-4 - 20201105
202011050480	IX-1 - 20201105
202011050481	IX-2 - 20201105
202011050482	IX-3 - 20201105
202011050483	IX-4 - 20201105
202011050514	GAC-5 - 20201105
202011050515	GAC-6 - 20201105
202011050516	GAC-7 - 20201105
202011050517	GAC-8 - 20201105

**Analysis Date: 11/09/2020**

Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>EPA Method 537.1 by EPA 537.1</b>									
<b>Prep Batch: 1286664 Analytical Batch: 1287084</b>					<b>Analysis Date: 11/10/2020</b>				
DUP_202011060270	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0236	ug/L	100	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0245	ug/L	104	(70-130)	30	3.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00184	ug/L	98	(50-150)		
MS_202011060284	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00179	ug/L	95	(50-150)		
DUP_202011060270	13C2-PFDA (S)			85.8	%	86	(70-130)		
LCS1	13C2-PFDA (S)		100	91.1	%	91	(70-130)		
LCS2	13C2-PFDA (S)		100	90.0	%	90	(70-130)		
MBLK	13C2-PFDA (S)			91.7	%	92	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	90.4	%	90	(70-130)		
MS_202011060284	13C2-PFDA (S)		100	89.0	%	89	(70-130)		
DUP_202011060270	13C2-PFHxA (S)			95.6	%	96	(70-130)		
LCS1	13C2-PFHxA (S)		100	98.1	%	98	(70-130)		
LCS2	13C2-PFHxA (S)		100	98.2	%	98	(70-130)		
MBLK	13C2-PFHxA (S)			97.2	%	97	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	95.2	%	95	(70-130)		
MS_202011060284	13C2-PFHxA (S)		100	97.0	%	97	(70-130)		
DUP_202011060270	13C2-PFOA- IS#1 (I)			99.2	%	99	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	96.7	%	97	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	99.5	%	100	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			97.7	%	98	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	99.6	%	100	(50-150)		
MS_202011060284	13C2-PFOA- IS#1 (I)		100	99.2	%	99	(50-150)		
DUP_202011060270	13C3-HFPO-DA (S)			90.4	%	90	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	93.3	%	93	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	94.2	%	94	(70-130)		
MBLK	13C3-HFPO-DA (S)			94.2	%	94	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	90.8	%	91	(70-130)		
MS_202011060284	13C3-HFPO-DA (S)		100	91.3	%	91	(70-130)		
DUP_202011060270	13C4-PFOS- IS#2 (I)			93.0	%	93	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	95.0	%	95	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	96.9	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			94.6	%	95	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	94.8	%	95	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 902203  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202011060284	13C4-PFOS- IS#2 (I)		100	95.6	%	96	(50-150)		
DUP_202011060270	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0259	ug/L	110	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0263	ug/L	111	(70-130)	30	1.5
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00200	ug/L	106	(50-150)		
MS_202011060284	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00201	ug/L	105	(50-150)		
DUP_202011060270	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0250	ug/L	107	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0254	ug/L	109	(70-130)	30	1.6
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00189	ug/L	102	(50-150)		
MS_202011060284	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00190	ug/L	102	(50-150)		
DUP_202011060270	d3-NMeFOSAA (I)			100	%	100	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	99.6	%	100	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	98.2	%	98	(50-150)		
MBLK	d3-NMeFOSAA (I)			97.8	%	98	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	99.1	%	99	(50-150)		
MS_202011060284	d3-NMeFOSAA (I)		100	99.0	%	99	(50-150)		
DUP_202011060270	d5-NEtFOSAA (S)			83.8	%	84	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	85.4	%	85	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	89.6	%	90	(70-130)		
MBLK	d5-NEtFOSAA (S)			87.6	%	88	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	85.9	%	86	(70-130)		
MS_202011060284	d5-NEtFOSAA (S)		100	84.4	%	84	(70-130)		
DUP_202011060270	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0272	ug/L	109	(70-130)	30	1.5
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00198	ug/L	99	(50-150)		
MS_202011060284	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00208	ug/L	104	(50-150)		
DUP_202011060270	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0247	ug/L	99	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0271	ug/L	108	(70-130)	30	9.3
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00199	ug/L	100	(50-150)		
MS_202011060284	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00196	ug/L	97	(50-150)		
DUP_202011060270	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0254	ug/L	102	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0261	ug/L	104	(70-130)	30	2.7
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00190	ug/L	95	(50-150)		
MS_202011060284	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00193	ug/L	95	(50-150)		
DUP_202011060270	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0241	ug/L	109	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0243	ug/L	110	(70-130)	30	0.83
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00189	ug/L	107	(50-150)		
MS_202011060284	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00192	ug/L	108	(50-150)		
DUP_202011060270	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0265	ug/L	106	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0274	ug/L	110	(70-130)	30	3.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00204	ug/L	102	(50-150)		
MS_202011060284	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00203	ug/L	100	(50-150)		
DUP_202011060270	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0258	ug/L	103	(70-130)	30	3.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00186	ug/L	93	(50-150)		
MS_202011060284	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00176	ug/L	88	(50-150)		
DUP_202011060270	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0284	ug/L	114	(70-130)	30	0.35
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00216	ug/L	108	(50-150)		
MS_202011060284	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00232	ug/L	114	(50-150)		
DUP_202011060270	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0247	ug/L	108	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0251	ug/L	110	(70-130)	30	1.6
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00195	ug/L	107	(50-150)		
MS_202011060284	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00197	ug/L	106	(50-150)		
DUP_202011060270	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0271	ug/L	108	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0276	ug/L	111	(70-130)	30	1.8

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 902203  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00208	ug/L	104	(50-150)		
MS_202011060284	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00224	ug/L	96	(50-150)		
DUP_202011060270	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0276	ug/L	111	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0278	ug/L	111	(70-130)	30	0.72
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00215	ug/L	108	(50-150)		
MS_202011060284	Perfluorononanoic acid (PFNA)	ND	0.002	0.00217	ug/L	107	(50-150)		
DUP_202011060270	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0237	ug/L	103	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0241	ug/L	104	(70-130)	30	1.7
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00192	ug/L	104	(50-150)		
MS_202011060284	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00192	ug/L	100	(50-150)		
DUP_202011060270	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0267	ug/L	107	(70-130)	30	1.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202011060284	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00222	ug/L	106	(50-150)		
DUP_202011060270	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0269	ug/L	107	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0279	ug/L	112	(70-130)	30	3.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00224	ug/L	112	(50-150)		
MS_202011060284	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00148	ug/L	70	(50-150)		
DUP_202011060270	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0252	ug/L	101	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0264	ug/L	105	(70-130)	30	4.7
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00188	ug/L	94	(50-150)		
MS_202011060284	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00191	ug/L	95	(50-150)		
DUP_202011060270	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0271	ug/L	108	(70-130)	30	1.9
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00199	ug/L	100	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202011060284	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00198	ug/L	99	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1286328 Analytical Batch: 1287138

Analysis Date: 11/09/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0474	ug/L	101	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0493	ug/L	105	(70-130)	30	3.9
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00215	ug/L	114	(50-150)		
MS1_202011040161	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0243	ug/L	103	(70-130)		
MSD1_202011040161	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0241	ug/L	102	(70-130)	30	0.91
LCS3	13C2-PFDA (S)		100	95.9	%	96	(70-130)		
LCS4	13C2-PFDA (S)		100	98.0	%	98	(70-130)		
MBLK	13C2-PFDA (S)			102	%	102	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	96.4	%	96	(70-130)		
MS1_202011040161	13C2-PFDA (S)		100	97.3	%	97	(70-130)		
MSD1_202011040161	13C2-PFDA (S)		100	97.4	%	97	(70-130)		
LCS3	13C2-PFHxA (S)		100	101	%	101	(70-130)		
LCS4	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFHxA (S)			111	%	111	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MS1_202011040161	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MSD1_202011040161	13C2-PFHxA (S)		100	101	%	101	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	94.5	%	94	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			89.7	%	90	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	90.6	%	91	(50-150)		
MS1_202011040161	13C2-PFOA- IS#1 (I)		100	97.8	%	98	(50-150)		
MSD1_202011040161	13C2-PFOA- IS#1 (I)		100	95.7	%	96	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	97.3	%	97	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	99.7	%	100	(70-130)		
MBLK	13C3-HFPO-DA (S)			102	%	102	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	99.0	%	99	(70-130)		
MS1_202011040161	13C3-HFPO-DA (S)		100	95.3	%	95	(70-130)		
MSD1_202011040161	13C3-HFPO-DA (S)		100	95.3	%	95	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	100	%	101	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	96.4	%	96	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			95.3	%	95	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	93.5	%	93	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202011040161	13C4-PFOS- IS#2 (I)		100	98.8	%	99	(50-150)		
MSD1_202011040161	13C4-PFOS- IS#2 (I)		100	95.6	%	96	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0487	ug/L	100	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0498	ug/L	103	(70-130)	30	2.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00201	ug/L	106	(50-150)		
MS1_202011040161	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0252	ug/L	107	(70-130)		
MSD1_202011040161	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0244	ug/L	103	(70-130)	30	3.4
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0496	ug/L	106	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0503	ug/L	108	(70-130)	30	1.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00208	ug/L	112	(50-150)		
MS1_202011040161	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0252	ug/L	108	(70-130)		
MSD1_202011040161	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0245	ug/L	105	(70-130)	30	2.7
LCS3	d3-NMeFOSAA (I)		100	98.6	%	99	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	94.0	%	94	(50-150)		
MBLK	d3-NMeFOSAA (I)			96.6	%	97	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	96.4	%	96	(50-150)		
MS1_202011040161	d3-NMeFOSAA (I)		100	98.6	%	99	(50-150)		
MSD1_202011040161	d3-NMeFOSAA (I)		100	95.2	%	95	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	92.6	%	93	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	94.8	%	95	(70-130)		
MBLK	d5-NEtFOSAA (S)			96.5	%	96	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	95.1	%	95	(70-130)		
MS1_202011040161	d5-NEtFOSAA (S)		100	90.6	%	91	(70-130)		
MSD1_202011040161	d5-NEtFOSAA (S)		100	94.0	%	94	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0529	ug/L	106	(70-130)	30	3.5
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00212	ug/L	106	(50-150)		
MS1_202011040161	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0258	ug/L	103	(70-130)		
MSD1_202011040161	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0251	ug/L	100	(70-130)	30	2.7
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0520	ug/L	104	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0525	ug/L	105	(70-130)	30	0.96
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00201	ug/L	100	(50-150)		
MS1_202011040161	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0264	ug/L	106	(70-130)		
MSD1_202011040161	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0261	ug/L	104	(70-130)	30	1.1

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0524	ug/L	105	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0526	ug/L	105	(70-130)	30	0.38
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	105	(50-150)		
MS1_202011040161	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0260	ug/L	104	(70-130)		
MSD1_202011040161	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0257	ug/L	103	(70-130)	30	1.2
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0455	ug/L	103	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0486	ug/L	110	(70-130)	30	6.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00195	ug/L	110	(50-150)		
MS1_202011040161	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0234	ug/L	104	(70-130)		
MSD1_202011040161	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0229	ug/L	102	(70-130)	30	2.0
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0535	ug/L	107	(70-130)	30	2.1
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00203	ug/L	101	(50-150)		
MS1_202011040161	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0280	ug/L	112	(70-130)		
MSD1_202011040161	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0265	ug/L	106	(70-130)	30	5.4
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0521	ug/L	104	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0550	ug/L	110	(70-130)	30	5.4
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00208	ug/L	104	(50-150)		
MS1_202011040161	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0270	ug/L	108	(70-130)		
MSD1_202011040161	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0261	ug/L	104	(70-130)	30	3.4
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0541	ug/L	108	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0568	ug/L	114	(70-130)	30	4.9
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00218	ug/L	109	(50-150)		
MS1_202011040161	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0285	ug/L	110	(70-130)		
MSD1_202011040161	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0276	ug/L	106	(70-130)	30	3.3
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0480	ug/L	105	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0504	ug/L	111	(70-130)	30	4.9
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00200	ug/L	110	(50-150)		
MS1_202011040161	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0247	ug/L	107	(70-130)		
MSD1_202011040161	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0248	ug/L	107	(70-130)	30	0.57
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0517	ug/L	103	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0548	ug/L	110	(70-130)	30	5.8

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 902203  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00222	ug/L	111	(50-150)		
MS1_202011040161	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0274	ug/L	105	(70-130)		
MSD1_202011040161	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0268	ug/L	103	(70-130)	30	2.0
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0528	ug/L	106	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0533	ug/L	107	(70-130)	30	0.94
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00207	ug/L	103	(50-150)		
MS1_202011040161	Perfluorononanoic acid (PFNA)	ND	0.025	0.0278	ug/L	110	(70-130)		
MSD1_202011040161	Perfluorononanoic acid (PFNA)	ND	0.025	0.0273	ug/L	108	(70-130)	30	1.9
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0499	ug/L	108	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0499	ug/L	108	(70-130)	30	0.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00197	ug/L	106	(50-150)		
MS1_202011040161	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0255	ug/L	106	(70-130)		
MSD1_202011040161	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0256	ug/L	106	(70-130)	30	0.29
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0531	ug/L	106	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0541	ug/L	108	(70-130)	30	1.9
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00227	ug/L	113	(50-150)		
MS1_202011040161	Perfluorooctanoic acid (PFOA)	0.0032	0.025	0.0299	ug/L	107	(70-130)		
MSD1_202011040161	Perfluorooctanoic acid (PFOA)	0.0032	0.025	0.0298	ug/L	106	(70-130)	30	0.44
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0576	ug/L	115	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0623	ug/L	125	(70-130)	30	7.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00293	ug/L	147	(50-150)		
MS1_202011040161	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0320	ug/L	128	(70-130)		
MSD1_202011040161	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0317	ug/L	127	(70-130)	30	1.1
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0504	ug/L	101	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0534	ug/L	107	(70-130)	30	5.8
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202011040161	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0270	ug/L	108	(70-130)		
MSD1_202011040161	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0263	ug/L	105	(70-130)	30	2.5
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0528	ug/L	106	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0533	ug/L	107	(70-130)	30	0.94
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00208	ug/L	104	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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**Report:** 902203  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202011040161	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0270	ug/L	108	(70-130)		
MSD1_202011040161	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0266	ug/L	106	(70-130)	30	1.6

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 11/10/2020

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**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 11/10/2020

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**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 11/10/2020

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**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)\*

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required

Approved by

Date of Issue: 11/10/2020

Quant Report - Page 1 of 1

Tel Fax

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles

REPORT REVISED,  
replaces the original report.



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 904643  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 904643  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **November 19, 2020 at 1416**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202011190346</u>	GAC-1-20201119	11/19/2020 0830
	@537.1	
<u>202011190347</u>	GAC-2-20201119	11/19/2020 0833
	@537.1	
<u>202011190348</u>	GAC-3-20201119	11/19/2020 0836
	@537.1	
<u>202011190349</u>	GAC-4-20201119	11/19/2020 0839
	@537.1	
<u>202011190350</u>	IX-1-20201119	11/19/2020 0842
	@537.1	
<u>202011190351</u>	IX-2-20201119	11/19/2020 0845
	@537.1	
<u>202011190352</u>	IX-3-20201119	11/19/2020 0848
	@537.1	
<u>202011190353</u>	IX-4-20201119	11/19/2020 0851
	@537.1	
<u>202011190355</u>	GAC-1M-20201119	11/19/2020 0854
	@537.1	
<u>202011190356</u>	GAC-2M-20201119	11/19/2020 0857
	@537.1	
<u>202011190357</u>	GAC-3M-20201119	11/19/2020 0900
	@537.1	
<u>202011190358</u>	GAC-4M-20201119	11/19/2020 0903
	@537.1	
<u>202011190359</u>	IX-1M-20201119	11/19/2020 0906
	@537.1	

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 904643  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **November 19, 2020 at 1416**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202011190360</u>	IX-2M-20201119	11/19/2020 0909
	@537.1	
<u>202011190361</u>	IX-3M--20201119	11/19/2020 0912
	@537.1	
<u>202011190362</u>	IX-4M-20201119	11/19/2020 0915
	@537.1	
<u>202011190363</u>	LH-INF-20201119	11/19/2020 0918
	@537.1	
<u>202011190364</u>	IX-5-20201119	11/19/2020 1100
	@537.1	
<u>202011190365</u>	IX-6-20201119	11/19/2020 1103
	@537.1	
<u>202011190366</u>	IX-7-20201119	11/19/2020 1106
	@537.1	
<u>202011190367</u>	IX-8-20201119	11/19/2020 1109
	@537.1	
<u>202011190368</u>	GAC-5--20201119	11/19/2020 1112
	@537.1	
<u>202011190369</u>	GAC-6--20201119	11/19/2020 1115
	@537.1	
<u>202011190370</u>	GAC-7-20201119	11/19/2020 1118
	@537.1	
<u>202011190371</u>	GAC-8-20201119	11/19/2020 1121
	@537.1	
<u>202011190372</u>	IX-5M-20201119	11/19/2020 1124
	@537.1	

**Acknowledgement of Samples Received**

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 904643  
Project: 0250000  
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

The following samples were received from you on **November 19, 2020 at 1416**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202011190373	IX-6M-20201119	11/19/2020 1127
	@537.1	
202011190374	IX-7M-20201119	11/19/2020 1130
	@537.1	
202011190375	IX-8M-20201119	11/19/2020 1133
	@537.1	
202011190376	GAC-5M-20201119	11/19/2020 1136
	@537.1	
202011190377	GAC-6M-20201119	11/19/2020 1139
	@537.1	
202011190378	GAC-7M-20201119	11/19/2020 1142
	@537.1	
202011190379	GAC-8M-20201119	11/19/2020 1145
	@537.1	
202011190380	MB-INF-20201119	11/19/2020 1148
	@537.1	

**Test Description**

@537.1 -- EPA Method 537.1



904644

FROM: GSI Environmental Inc.  
19200 Von Karman Ave, Suite 800  
Irvine, CA 92612  
(949) 679-1070

PROJECT NAME: WRD Pilot

PROJECT CONTACT: Miae Jeon

GLOBAL ID:

TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com

LABORATORY: Eurofins Eaton Analytical

PROJECT NO.: 5302

LAB CONTACT: Sophia Liang

SAMPLER(S): (PRINT)  
*Becky Chen*

**REQUESTED ANALYSES**  
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION		PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)	
		DATE	TIME			Unpreserved	Field Filtered														
	GAC-1-20201119	11/19/2020	0830	Water	2	Unpreserved	Field Filtered	X													
	GAC-2-20201119	11/19/2020	0833	Water	2	Unpreserved	Field Filtered	X													
	GAC-3-20201119	11/19/2020	0836	Water	2	Unpreserved	Field Filtered	X													
	GAC-4-20201119	11/19/2020	0839	Water	2	Unpreserved	Field Filtered	X													
	IX-1-20201119	11/19/2020	0842	Water	2	Unpreserved	Field Filtered	X													
	IX-2-20201119	11/19/2020	0845	Water	2	Unpreserved	Field Filtered	X													
	IX-3-20201119	11/19/2020	0848	Water	2	Unpreserved	Field Filtered	X													
	IX-4-20201119	11/19/2020	0851	Water	2	Unpreserved	Field Filtered	X													
	GAC-1M-20201119	11/19/2020	0854	Water	2	Unpreserved	Field Filtered	X													
	GAC-2M-20201119	11/19/2020	0857	Water	2	Unpreserved	Field Filtered	X													
	GAC-3M-20201119	11/19/2020	0900	Water	2	Unpreserved	Field Filtered	X													
	GAC-4M-20201119	11/19/2020	0903	Water	2	Unpreserved	Field Filtered	X													
	IX-1M-20201119	11/19/2020	0906	Water	2	Unpreserved	Field Filtered	X													
	IX-2M-20201119	11/19/2020	0909	Water	2	Unpreserved	Field Filtered	X													
	IX-3M-20201119	11/19/2020	0912	Water	2	Unpreserved	Field Filtered	X													
	IX-4M-20201119	11/19/2020	0915	Water	2	Unpreserved	Field Filtered	X													
	LH-INF-20201119	11/19/2020	0918	Water	2	Unpreserved	Field Filtered	X													

TURNAROUND TIME:  SAME DAY  24 HR  48 HR  STANDARD

SPECIAL INSTRUCTIONS:  
Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdorres@gsi-net.com;  
Provide EDD of sample results

RECEIVED BY: (Signature) *[Signature]* Date: 11/19/20 Time: 1414

RECEIVED BY: (Signature) *[Signature]* Date: 11/19/20 Time: 1416

RECEIVED BY: (Signature) *[Signature]* Date: 11/19/20 Time: 1416





Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 904643  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---

**Flags Legend:**

MC - Matrix spike recovery was high; the associated blank spike recovery was acceptable. MS/MSD RPD met acceptance criteria.

REVISED REPORT. UPDATE SAMPLE ID TO MATCH COC. SFL 12/3/2020.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202011190350      <u>IX-1-20201119</u></b>						
11/23/2020 13:10	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
11/23/2020 13:10	Perfluorooctanoic acid (PFOA)		0.0024		ug/L	0.0020
<b>202011190351      <u>IX-2-20201119</u></b>						
11/23/2020 13:20	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
<b>202011190352      <u>IX-3-20201119</u></b>						
11/23/2020 13:29	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
11/23/2020 13:29	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
11/23/2020 13:29	Perfluorooctanoic acid (PFOA)		0.0020		ug/L	0.0020
<b>202011190353      <u>IX-4-20201119</u></b>						
11/23/2020 13:39	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
<b>202011190355      <u>GAC-1M-20201119</u></b>						
11/23/2020 13:58	Perfluorobutanesulfonic acid (PFBS)		0.0041		ug/L	0.0020
11/23/2020 13:58	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
11/23/2020 13:58	Perfluorooctanoic acid (PFOA)		0.0034		ug/L	0.0020
<b>202011190356      <u>GAC-2M-20201119</u></b>						
11/23/2020 14:08	Perfluorobutanesulfonic acid (PFBS)		0.0068		ug/L	0.0020
11/23/2020 14:08	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
<b>202011190357      <u>GAC-3M-20201119</u></b>						
11/23/2020 14:17	Perfluorobutanesulfonic acid (PFBS)		0.0063		ug/L	0.0020
11/23/2020 14:17	Perfluorohexanesulfonic acid (PFHxS)		0.0026		ug/L	0.0020
11/23/2020 14:17	Perfluorohexanoic acid (PFHxA)		0.0035		ug/L	0.0020
11/23/2020 14:17	Perfluorooctanesulfonic acid (PFOS)		0.0036		ug/L	0.0020
11/23/2020 14:17	Perfluorooctanoic acid (PFOA)		0.0055		ug/L	0.0020
<b>202011190358      <u>GAC-4M-20201119</u></b>						
11/23/2020 14:27	Perfluorobutanesulfonic acid (PFBS)		0.0023		ug/L	0.0020
11/23/2020 14:27	Perfluorooctanesulfonic acid (PFOS)		0.0023		ug/L	0.0020
11/23/2020 14:27	Perfluorooctanoic acid (PFOA)		0.0022		ug/L	0.0020
<b>202011190359      <u>IX-1M-20201119</u></b>						
11/23/2020 14:36	Perfluorobutanesulfonic acid (PFBS)		0.0020		ug/L	0.0020
11/23/2020 14:36	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
11/23/2020 14:36	Perfluorooctanesulfonic acid (PFOS)		0.0042		ug/L	0.0020
11/23/2020 14:36	Perfluorooctanoic acid (PFOA)		0.0075		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202011190360      <u>IX-2M-20201119</u></b>						
11/23/2020 14:46	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
11/23/2020 14:46	Perfluorooctanoic acid (PFOA)		0.0087		ug/L	0.0020
<b>202011190361      <u>IX-3M--20201119</u></b>						
11/23/2020 14:55	Perfluorobutanesulfonic acid (PFBS)		0.0035		ug/L	0.0020
11/23/2020 14:55	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
11/23/2020 14:55	Perfluorooctanoic acid (PFOA)		0.0088		ug/L	0.0020
<b>202011190362      <u>IX-4M-20201119</u></b>						
11/23/2020 23:36	Perfluorobutanesulfonic acid (PFBS)		0.0050		ug/L	0.0020
11/23/2020 23:36	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
11/23/2020 23:36	Perfluorononanoic acid (PFNA)		0.0024		ug/L	0.0020
11/23/2020 23:36	Perfluorooctanesulfonic acid (PFOS)		0.0031		ug/L	0.0020
11/23/2020 23:36	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
<b>202011190363      <u>LH-INF-20201119</u></b>						
11/23/2020 22:00	Perfluorobutanesulfonic acid (PFBS)		0.0071		ug/L	0.0020
11/23/2020 22:00	Perfluorohexanesulfonic acid (PFHxS)		0.0060		ug/L	0.0020
11/23/2020 22:00	Perfluorohexanoic acid (PFHxA)		0.0035		ug/L	0.0020
11/23/2020 22:00	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
11/23/2020 22:00	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
11/23/2020 22:00	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
<b>202011190364      <u>IX-5-20201119</u></b>						
11/23/2020 23:45	Perfluorohexanoic acid (PFHxA)		0.0044		ug/L	0.0020
11/23/2020 23:45	Perfluorooctanoic acid (PFOA)		0.0023		ug/L	0.0020
<b>202011190365      <u>IX-6-20201119</u></b>						
11/24/2020 00:06	Perfluoroheptanoic acid (PFHpA)		0.0023		ug/L	0.0020
11/24/2020 00:06	Perfluorohexanoic acid (PFHxA)		0.0066		ug/L	0.0020
<b>202011190366      <u>IX-7-20201119</u></b>						
11/24/2020 00:17	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
11/24/2020 00:17	Perfluorohexanoic acid (PFHxA)		0.0069		ug/L	0.0020
11/24/2020 00:17	Perfluorooctanoic acid (PFOA)		0.0037		ug/L	0.0020
<b>202011190367      <u>IX-8-20201119</u></b>						
11/24/2020 00:26	Perfluoroheptanoic acid (PFHpA)		0.0029		ug/L	0.0020
11/24/2020 00:26	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
<b>202011190368      <u>GAC-5--20201119</u></b>						

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
11/24/2020 00:36	Perfluorobutanesulfonic acid (PFBS)		0.0098		ug/L	0.0020
11/24/2020 00:36	Perfluoroheptanoic acid (PFHpA)		0.0033		ug/L	0.0020
11/24/2020 00:36	Perfluorohexanoic acid (PFHxA)		0.0074		ug/L	0.0020
11/24/2020 00:36	Perfluorooctanesulfonic acid (PFOS)		0.0034		ug/L	0.0020
11/24/2020 00:36	Perfluorooctanoic acid (PFOA)		0.0073		ug/L	0.0020
		<b>202011190369      <u>GAC-6--20201119</u></b>				
11/24/2020 00:45	Perfluorobutanesulfonic acid (PFBS)		0.018		ug/L	0.0020
11/24/2020 00:45	Perfluoroheptanoic acid (PFHpA)		0.0024		ug/L	0.0020
11/24/2020 00:45	Perfluorohexanoic acid (PFHxA)		0.011		ug/L	0.0020
		<b>202011190370      <u>GAC-7-20201119</u></b>				
11/24/2020 00:55	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
11/24/2020 00:55	Perfluoroheptanoic acid (PFHpA)		0.0038		ug/L	0.0020
11/24/2020 00:55	Perfluorohexanesulfonic acid (PFHxS)		0.0021		ug/L	0.0020
11/24/2020 00:55	Perfluorohexanoic acid (PFHxA)		0.0082		ug/L	0.0020
11/24/2020 00:55	Perfluorooctanoic acid (PFOA)		0.0062		ug/L	0.0020
		<b>202011190371      <u>GAC-8-20201119</u></b>				
11/24/2020 01:05	Perfluorobutanesulfonic acid (PFBS)		0.0055		ug/L	0.0020
11/24/2020 01:05	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
		<b>202011190372      <u>IX-5M-20201119</u></b>				
11/24/2020 01:14	Perfluorobutanesulfonic acid (PFBS)		0.0028		ug/L	0.0020
11/24/2020 01:14	Perfluoroheptanoic acid (PFHpA)		0.0034		ug/L	0.0020
11/24/2020 01:14	Perfluorohexanoic acid (PFHxA)		0.0062		ug/L	0.0020
11/24/2020 01:14	Perfluorooctanesulfonic acid (PFOS)		0.0035		ug/L	0.0020
11/24/2020 01:14	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
		<b>202011190373      <u>IX-6M-20201119</u></b>				
11/24/2020 01:24	Perfluorobutanesulfonic acid (PFBS)		0.0025		ug/L	0.0020
11/24/2020 01:24	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
11/24/2020 01:24	Perfluorohexanoic acid (PFHxA)		0.0054		ug/L	0.0020
11/24/2020 01:24	Perfluorooctanoic acid (PFOA)		0.0096		ug/L	0.0020
		<b>202011190374      <u>IX-7M-20201119</u></b>				
11/24/2020 02:16	Perfluorobutanesulfonic acid (PFBS)		0.0059		ug/L	0.0020
11/24/2020 02:16	Perfluoroheptanoic acid (PFHpA)		0.0046		ug/L	0.0020
11/24/2020 02:16	Perfluorohexanoic acid (PFHxA)		0.0074		ug/L	0.0020
11/24/2020 02:16	Perfluorononanoic acid (PFNA)		0.0024		ug/L	0.0020
11/24/2020 02:16	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020

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 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202011190375      <u>IX-8M-20201119</u></b>						
11/24/2020 02:26	Perfluorobutanesulfonic acid (PFBS)		0.0040		ug/L	0.0020
11/24/2020 02:26	Perfluoroheptanoic acid (PFHpA)		0.0046		ug/L	0.0020
11/24/2020 02:26	Perfluorohexanoic acid (PFHxA)		0.0073		ug/L	0.0020
11/24/2020 02:26	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
<b>202011190376      <u>GAC-5M-20201119</u></b>						
11/24/2020 01:57	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
11/24/2020 01:57	Perfluoroheptanoic acid (PFHpA)		0.0044		ug/L	0.0020
11/24/2020 01:57	Perfluorohexanesulfonic acid (PFHxS)		0.0043		ug/L	0.0020
11/24/2020 01:57	Perfluorohexanoic acid (PFHxA)		0.0079		ug/L	0.0020
11/24/2020 01:57	Perfluorononanoic acid (PFNA)		0.0021		ug/L	0.0020
11/24/2020 01:57	Perfluorooctanesulfonic acid (PFOS)		0.014		ug/L	0.0020
11/24/2020 01:57	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
<b>202011190377      <u>GAC-6M-20201119</u></b>						
11/24/2020 02:35	Perfluorobutanesulfonic acid (PFBS)		0.013		ug/L	0.0020
11/24/2020 02:35	Perfluoroheptanoic acid (PFHpA)		0.0056		ug/L	0.0020
11/24/2020 02:35	Perfluorohexanesulfonic acid (PFHxS)		0.0058		ug/L	0.0020
11/24/2020 02:35	Perfluorohexanoic acid (PFHxA)		0.0085		ug/L	0.0020
11/24/2020 02:35	Perfluorooctanesulfonic acid (PFOS)		0.0061		ug/L	0.0020
11/24/2020 02:35	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
<b>202011190378      <u>GAC-7M-20201119</u></b>						
11/24/2020 02:45	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
11/24/2020 02:45	Perfluoroheptanoic acid (PFHpA)		0.0048		ug/L	0.0020
11/24/2020 02:45	Perfluorohexanesulfonic acid (PFHxS)		0.0058		ug/L	0.0020
11/24/2020 02:45	Perfluorohexanoic acid (PFHxA)		0.0084		ug/L	0.0020
11/24/2020 02:45	Perfluorononanoic acid (PFNA)		0.0023		ug/L	0.0020
11/24/2020 02:45	Perfluorooctanesulfonic acid (PFOS)		0.017		ug/L	0.0020
11/24/2020 02:45	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
<b>202011190379      <u>GAC-8M-20201119</u></b>						
11/24/2020 02:54	Perfluorobutanesulfonic acid (PFBS)		0.0094		ug/L	0.0020
11/24/2020 02:54	Perfluoroheptanoic acid (PFHpA)		0.0037		ug/L	0.0020
11/24/2020 02:54	Perfluorohexanesulfonic acid (PFHxS)		0.0036		ug/L	0.0020
11/24/2020 02:54	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
11/24/2020 02:54	Perfluorooctanesulfonic acid (PFOS)		0.013		ug/L	0.0020
11/24/2020 02:54	Perfluorooctanoic acid (PFOA)		0.0098		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**



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Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	<b>202011190380</b>	<b><u>MB-INF-20201119</u></b>				
11/24/2020 03:04	Perfluorobutanesulfonic acid (PFBS)		0.010		ug/L	0.0020
11/24/2020 03:04	Perfluoroheptanoic acid (PFHpA)		0.0047		ug/L	0.0020
11/24/2020 03:04	Perfluorohexanesulfonic acid (PFHxS)		0.0067		ug/L	0.0020
11/24/2020 03:04	Perfluorohexanoic acid (PFHxA)		0.0070		ug/L	0.0020
11/24/2020 03:04	Perfluorononanoic acid (PFNA)		0.0040		ug/L	0.0020
11/24/2020 03:04	Perfluorooctanesulfonic acid (PFOS)		0.043		ug/L	0.0020
11/24/2020 03:04	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020

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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20201119 (202011190346)</b>					<b>Sampled on 11/19/2020 0830</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	13C2-PFDA	110	%		1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	13C2-PFHxA	114	%		1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	107	%		1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	96	%		1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	106	%		1

<b>GAC-2-20201119 (202011190347)</b>					<b>Sampled on 11/19/2020 0833</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	13C2-PFDA	109	%		1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	13C2-PFHxA	115	%		1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	107	%		1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	94	%		1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	109	%		1

**GAC-3-20201119 (202011190348)**

Sampled on 11/19/2020 0836

**EPA 537.1 - EPA Method 537.1**

11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 904643  
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 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	13C2-PFDA	106	%		1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	13C2-PFHxA	120	%		1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	103	%		1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	97	%		1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	106	%		1

**GAC-4-20201119 (202011190349)**

Sampled on 11/19/2020 0839

**EPA 537.1 - EPA Method 537.1**

11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	13C2-PFDA	106	%		1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	13C2-PFHxA	111	%		1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	101	%		1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	96	%		1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**IX-1-20201119 (202011190350)**

Sampled on 11/19/2020 0842

**EPA 537.1 - EPA Method 537.1**

11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0024	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	13C2-PFDA	109	%		1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	13C2-PFHxA	113	%		1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	109	%		1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	95	%		1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**IX-2-20201119 (202011190351)**

**Sampled on 11/19/2020 0845**

**EPA 537.1 - EPA Method 537.1**

11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	13C2-PFDA	105	%		1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	13C2-PFHxA	110	%		1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	104	%		1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	94	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	103	%		1
<b>IX-3-20201119 (202011190352)</b>					<b>Sampled on 11/19/2020 0848</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0020	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	13C2-PFDA	113	%		1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	13C2-PFHxA	113	%		1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	110	%		1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	92	%		1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	107	%		1

**IX-4-20201119 (202011190353)**

**Sampled on 11/19/2020 0851**

**EPA 537.1 - EPA Method 537.1**

11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	13C2-PFDA	108	%		1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	13C2-PFHxA	112	%		1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	106	%		1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	92	%		1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	d5-NETFOSAA	106	%		1

**GAC-1M-20201119 (202011190355)**

Sampled on 11/19/2020 0854

**EPA 537.1 - EPA Method 537.1**

11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0041	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0034	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	13C2-PFDA	107	%		1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	13C2-PFHxA	115	%		1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	106	%		1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	91	%		1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**GAC-2M-20201119 (202011190356)**

Sampled on 11/19/2020 0857

**EPA 537.1 - EPA Method 537.1**

11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0068	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	13C2-PFDA	110	%		1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	13C2-PFHxA	116	%		1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	107	%		1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	90	%		1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	109	%		1

**GAC-3M-20201119 (202011190357)**

Sampled on 11/19/2020 0900

**EPA 537.1 - EPA Method 537.1**

11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0063	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0026	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0035	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0036	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0055	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	13C2-PFDA	109	%		1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	13C2-PFHxA	118	%		1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	112	%		1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	91	%		1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	107	%		1

**GAC-4M-20201119 (202011190358)**

**Sampled on 11/19/2020 0903**

**EPA 537.1 - EPA Method 537.1**

11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0023	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0023	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0022	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	13C2-PFDA	107	%		1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	13C2-PFHxA	114	%		1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	103	%		1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	92	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	101	%		1
<b>IX-1M-20201119 (202011190359)</b>					<b>Sampled on 11/19/2020 0906</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0020	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0042	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0075	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	13C2-PFDA	111	%		1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	13C2-PFHxA	112	%		1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	108	%		1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	93	%		1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**IX-2M-20201119 (202011190360)**

**Sampled on 11/19/2020 0909**

**EPA 537.1 - EPA Method 537.1**

11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0087	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	13C2-PFDA	112	%		1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	13C2-PFHxA	114	%		1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	107	%		1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	89	%		1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	d5-NETFOSAA	110	%		1

**IX-3M--20201119 (202011190361)**

Sampled on 11/19/2020 0912

**EPA 537.1 - EPA Method 537.1**

11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0035	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0088	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	13C2-PFDA	111	%		1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	13C2-PFHxA	119	%		1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	110	%		1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	93	%		1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	106	%		1

**IX-4M-20201119 (202011190362)**

Sampled on 11/19/2020 0915

**EPA 537.1 - EPA Method 537.1**

11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0050	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0024	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0031	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	13C2-PFDA	101	%		1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	13C2-PFHxA	98	%		1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	96	%		1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	100	%		1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**LH-INF-20201119 (202011190363)**

**Sampled on 11/19/2020 0918**

**EPA 537.1 - EPA Method 537.1**

11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0071	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0060	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0035	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012 (MC)	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	13C2-PFDA	102	%		1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	13C2-PFHxA	99	%		1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	95	%		1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**IX-5-20201119 (202011190364)**

**Sampled on 11/19/2020 1100**

**EPA 537.1 - EPA Method 537.1**

11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0044	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0023	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	13C2-PFDA	103	%		1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	13C2-PFHxA	97	%		1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	94	%		1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	100	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	98	%		1
<b>IX-6-20201119 (202011190365)</b>					<b>Sampled on 11/19/2020 1103</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0023	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0066	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	13C2-PFDA	102	%		1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	13C2-PFHxA	99	%		1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	97	%		1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	97	%		1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	99	%		1

<b>IX-7-20201119 (202011190366)</b>					<b>Sampled on 11/19/2020 1106</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0069	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0037	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	13C2-PFDA	106	%		1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	13C2-PFHxA	100	%		1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	101	%		1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	97	%		1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	d5-NETFOSAA	101	%		1

**IX-8-20201119 (202011190367)**

**Sampled on 11/19/2020 1109**

**EPA 537.1 - EPA Method 537.1**

11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0029	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	13C2-PFDA	103	%		1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	13C2-PFHxA	101	%		1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	100	%		1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	100	%		1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**GAC-5--20201119 (202011190368)**

Sampled on 11/19/2020 1112

**EPA 537.1 - EPA Method 537.1**

11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0098	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0074	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0034	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0073	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	13C2-PFDA	102	%		1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	13C2-PFHxA	101	%		1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	97	%		1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	100	%		1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**GAC-6--20201119 (202011190369)**

Sampled on 11/19/2020 1115

**EPA 537.1 - EPA Method 537.1**

11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.018	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0024	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.011	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	13C2-PFDA	101	%		1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	13C2-PFHxA	104	%		1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	98	%		1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**GAC-7-20201119 (202011190370)**

**Sampled on 11/19/2020 1118**

**EPA 537.1 - EPA Method 537.1**

11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0038	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0021	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0082	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0062	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	13C2-PFDA	107	%		1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	13C2-PFHxA	105	%		1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	102	%		1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	98	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	105	%		1
<b>GAC-8-20201119 (202011190371)</b>					<b>Sampled on 11/19/2020 1121</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0055	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	13C2-PFDA	104	%		1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	13C2-PFHxA	105	%		1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	100	%		1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	100	%		1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**IX-5M-20201119 (202011190372)**

**Sampled on 11/19/2020 1124**

**EPA 537.1 - EPA Method 537.1**

11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0028	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0034	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0062	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0035	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	13C2-PFDA	106	%		1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	13C2-PFHxA	100	%		1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	97	%		1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	98	%		1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	d5-NETFOSAA	105	%		1

**IX-6M-20201119 (202011190373)**

Sampled on 11/19/2020 1127

**EPA 537.1 - EPA Method 537.1**

11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0025	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0054	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0096	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	13C2-PFDA	107	%		1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	13C2-PFHxA	102	%		1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	99	%		1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	100	%		1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	101	%		1

**IX-7M-20201119 (202011190374)**

Sampled on 11/19/2020 1130

**EPA 537.1 - EPA Method 537.1**

11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0059	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0046	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0074	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0024	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	13C2-PFDA	110	%		1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	13C2-PFHxA	108	%		1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	13C3-HFPO-DA	102	%		1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	d3-NMeFOSAA	96	%		1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**IX-8M-20201119 (202011190375)**

Sampled on 11/19/2020 1133

**EPA 537.1 - EPA Method 537.1**

11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0040	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0046	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0073	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	13C2-PFDA	110	%		1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	13C2-PFHxA	110	%		1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	13C3-HFPO-DA	104	%		1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	d3-NMeFOSAA	98	%		1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**GAC-5M-20201119 (202011190376)**

**Sampled on 11/19/2020 1136**

**EPA 537.1 - EPA Method 537.1**

11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0044	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0043	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0079	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0021	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.014	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	13C2-PFDA	109	%		1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	13C2-PFHxA	112	%		1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	13C3-HFPO-DA	101	%		1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	d3-NMeFOSAA	99	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	d5-NEtFOSAA	100	%		1
<b>GAC-6M-20201119 (202011190377)</b>					<b>Sampled on 11/19/2020 1139</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.013	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0056	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0058	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0085	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0061	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	13C2-PFDA	107	%		1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	13C2-PFHxA	113	%		1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	13C3-HFPO-DA	103	%		1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	d3-NMeFOSAA	100	%		1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**GAC-7M-20201119 (202011190378)**

**Sampled on 11/19/2020 1142**

**EPA 537.1 - EPA Method 537.1**

11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0048	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0058	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0084	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0023	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.017	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	13C2-PFDA	105	%		1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	13C2-PFHxA	111	%		1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	13C3-HFPO-DA	102	%		1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	d3-NMeFOSAA	96	%		1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	d5-NETFOSAA	103	%		1

**GAC-8M-20201119 (202011190379)**

Sampled on 11/19/2020 1145

**EPA 537.1 - EPA Method 537.1**

11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0094	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0037	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0036	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.013	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0098	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	13C2-PFDA	111	%		1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	13C2-PFHxA	115	%		1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	13C3-HFPO-DA	105	%		1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	d3-NMeFOSAA	98	%		1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	d5-NEtFOSAA	101	%		1

**MB-INF-20201119 (202011190380)**

**Sampled on 11/19/2020 1148**

**EPA 537.1 - EPA Method 537.1**

11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0047	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0067	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0070	ug/L	0.0020	1

Rounding on totals after summation.  
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**Report:** 904643  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0040	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.043	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	13C2-PFDA	108	%		1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	13C2-PFHxA	106	%		1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	13C3-HFPO-DA	98	%		1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	d5-NEtFOSAA	99	%		1

Rounding on totals after summation.  
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Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

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**EPA Method 537.1**

**Prep Batch: 1289712 Analytical Batch: 1290300**

**Analysis Date: 11/23/2020**

202011190346	GAC-1-20201119
202011190347	GAC-2-20201119
202011190348	GAC-3-20201119
202011190349	GAC-4-20201119
202011190350	IX-1-20201119
202011190351	IX-2-20201119
202011190352	IX-3-20201119
202011190353	IX-4-20201119
202011190355	GAC-1M-20201119
202011190356	GAC-2M-20201119
202011190357	GAC-3M-20201119
202011190358	GAC-4M-20201119
202011190359	IX-1M-20201119
202011190360	IX-2M-20201119
202011190361	IX-3M--20201119

Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
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 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ

**EPA Method 537.1**

**Prep Batch: 1289956 Analytical Batch: 1290319**

**Analysis Date: 11/24/2020**

202011190374	IX-7M-20201119
202011190375	IX-8M-20201119
202011190376	GAC-5M-20201119
202011190377	GAC-6M-20201119
202011190378	GAC-7M-20201119
202011190379	GAC-8M-20201119
202011190380	MB-INF-20201119

Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ

**EPA Method 537.1**

**Prep Batch: 1289861 Analytical Batch: 1290329**

**Analysis Date: 11/23/2020**

202011190362	IX-4M-20201119
202011190363	LH-INF-20201119
202011190364	IX-5-20201119
202011190365	IX-6-20201119
202011190366	IX-7-20201119
202011190367	IX-8-20201119
202011190368	GAC-5--20201119
202011190369	GAC-6--20201119
202011190370	GAC-7-20201119
202011190371	GAC-8-20201119
202011190372	IX-5M-20201119
202011190373	IX-6M-20201119

Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
 Analyzed by: Y7BM  
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Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>EPA Method 537.1 by EPA 537.1</b>									
<b>Analytical Batch: 1290300</b>					<b>Analysis Date: 11/23/2020</b>				
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0474	ug/L	101	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0499	ug/L	106	(70-130)	30	4.9
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00195	ug/L	104	(50-150)		
MS_202011240093	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00167	ug/L	89	(50-150)		
MSD_202011240093	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00180	ug/L	95	(50-150)	50	7.7
LCS3	13C2-PFDA (S)		100	107	%	107	(70-130)		
LCS4	13C2-PFDA (S)		100	112	%	112	(70-130)		
MBLK	13C2-PFDA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	111	%	111	(70-130)		
MS_202011240093	13C2-PFDA (S)		100	94.2	%	94	(70-130)		
MSD_202011240093	13C2-PFDA (S)		100	93.3	%	93	(70-130)		
LCS3	13C2-PFHxA (S)		100	112	%	112	(70-130)		
LCS4	13C2-PFHxA (S)		100	116	%	116	(70-130)		
MBLK	13C2-PFHxA (S)			111	%	111	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	116	%	117	(70-130)		
MS_202011240093	13C2-PFHxA (S)		100	113	%	113	(70-130)		
MSD_202011240093	13C2-PFHxA (S)		100	111	%	111	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	97.9	%	98	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	96.9	%	97	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	98.6	%	99	(50-150)		
MS_202011240093	13C2-PFOA- IS#1 (I)		100	96.6	%	97	(50-150)		
MSD_202011240093	13C2-PFOA- IS#1 (I)		100	97.0	%	97	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
MBLK	13C3-HFPO-DA (S)			107	%	107	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
MS_202011240093	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
MSD_202011240093	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	96.2	%	96	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	97.1	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			98.8	%	99	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	97.9	%	98	(50-150)		
MS_202011240093	13C4-PFOS- IS#2 (I)		100	94.9	%	95	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.



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Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202011240093	13C4-PFOS- IS#2 (I)		100	94.2	%	94	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0501	ug/L	103	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0516	ug/L	106	(70-130)	30	3.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00212	ug/L	112	(50-150)		
MS_202011240093	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00209	ug/L	109	(50-150)		
MSD_202011240093	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00214	ug/L	111	(50-150)	50	2.5
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0480	ug/L	103	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0501	ug/L	108	(70-130)	30	4.3
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00201	ug/L	108	(50-150)		
MS_202011240093	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00179	ug/L	96	(50-150)		
MSD_202011240093	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00183	ug/L	98	(50-150)	50	2.4
LCS3	d3-NMeFOSAA (I)		100	96.4	%	96	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	97.4	%	97	(50-150)		
MBLK	d3-NMeFOSAA (I)			98.9	%	99	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	98.4	%	98	(50-150)		
MS_202011240093	d3-NMeFOSAA (I)		100	95.0	%	95	(50-150)		
MSD_202011240093	d3-NMeFOSAA (I)		100	94.1	%	94	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MBLK	d5-NEtFOSAA (S)			107	%	107	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
MS_202011240093	d5-NEtFOSAA (S)		100	77.4	%	77	(70-130)		
MSD_202011240093	d5-NEtFOSAA (S)		100	79.9	%	80	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0516	ug/L	103	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0546	ug/L	109	(70-130)	30	5.7
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00209	ug/L	105	(50-150)		
MS_202011240093	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00212	ug/L	106	(50-150)		
MSD_202011240093	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00220	ug/L	110	(50-150)	50	3.8
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0496	ug/L	99	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0513	ug/L	103	(70-130)	30	3.4
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00210	ug/L	105	(50-150)		
MS_202011240093	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00175	ug/L	88	(50-150)		
MSD_202011240093	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00176	ug/L	88	(50-150)	50	0.46
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0507	ug/L	101	(70-130)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0524	ug/L	105	(70-130)	30	3.3
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00207	ug/L	103	(50-150)		
MS_202011240093	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00172	ug/L	85	(50-150)		
MSD_202011240093	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00168	ug/L	82	(50-150)	50	2.4
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0493	ug/L	111	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0504	ug/L	114	(70-130)	30	2.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00208	ug/L	117	(50-150)		
MS_202011240093	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00207	ug/L	116	(50-150)		
MSD_202011240093	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00207	ug/L	117	(50-150)	50	0.15
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0527	ug/L	105	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0555	ug/L	111	(70-130)	30	5.2
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202011240093	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00202	ug/L	101	(50-150)		
MSD_202011240093	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00195	ug/L	97	(50-150)	50	3.6
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0561	ug/L	112	(70-130)	30	5.3
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202011240093	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00203	ug/L	102	(50-150)		
MSD_202011240093	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00204	ug/L	102	(50-150)	50	0.38
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0545	ug/L	109	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0561	ug/L	112	(70-130)	30	2.9
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00238	ug/L	119	(50-150)		
MS_202011240093	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00244	ug/L	119	(50-150)		
MSD_202011240093	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00235	ug/L	115	(50-150)	50	4.0
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0498	ug/L	109	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0500	ug/L	110	(70-130)	30	0.40
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00209	ug/L	115	(50-150)		
MS_202011240093	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00213	ug/L	116	(50-150)		
MSD_202011240093	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00215	ug/L	118	(50-150)	50	0.91
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0544	ug/L	109	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0576	ug/L	115	(70-130)	30	5.7
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202011240093	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00239	ug/L	116	(50-150)		
MSD_202011240093	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00232	ug/L	113	(50-150)	50	2.8
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0564	ug/L	113	(70-130)	30	7.3
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00238	ug/L	119	(50-150)		
MS_202011240093	Perfluorononanoic acid (PFNA)	ND	0.002	0.00221	ug/L	108	(50-150)		
MSD_202011240093	Perfluorononanoic acid (PFNA)	ND	0.002	0.00217	ug/L	107	(50-150)	50	1.7
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0523	ug/L	113	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0531	ug/L	115	(70-130)	30	1.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00225	ug/L	121	(50-150)		
MS_202011240093	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00205	ug/L	107	(50-150)		
MSD_202011240093	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00207	ug/L	108	(50-150)	50	0.79
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0556	ug/L	111	(70-130)	30	4.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00230	ug/L	115	(50-150)		
MS_202011240093	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00229	ug/L	114	(50-150)		
MSD_202011240093	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00228	ug/L	114	(50-150)	50	0.27
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0518	ug/L	104	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0553	ug/L	111	(70-130)	30	6.5
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00225	ug/L	112	(50-150)		
MS_202011240093	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00210	ug/L	96	(50-150)		
MSD_202011240093	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00217	ug/L	100	(50-150)	50	3.1
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0492	ug/L	98	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0511	ug/L	102	(70-130)	30	3.8
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00200	ug/L	100	(50-150)		
MS_202011240093	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00181	ug/L	90	(50-150)		
MSD_202011240093	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00189	ug/L	94	(50-150)	50	4.4
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0503	ug/L	101	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0535	ug/L	107	(70-130)	30	6.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202011240093	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00192	ug/L	96	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202011240093	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00189	ug/L	95	(50-150)	50	1.4

EPA Method 537.1 by EPA 537.1

Prep Batch: 1289956 Analytical Batch: 1290319

Analysis Date: 11/24/2020

DUP_202011190376	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0240	ug/L	102	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0243	ug/L	103	(70-130)	30	1.2
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00181	ug/L	96	(50-150)		
MS2_202011170274	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0475	ug/L	101	(70-130)		
DUP_202011190376	13C2-PFDA (S)			108	%	108	(70-130)		
LCS1	13C2-PFDA (S)		100	105	%	105	(70-130)		
LCS2	13C2-PFDA (S)		100	110	%	110	(70-130)		
MBLK	13C2-PFDA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	110	%	110	(70-130)		
MS2_202011170274	13C2-PFDA (S)		100	110	%	111	(70-130)		
DUP_202011190376	13C2-PFHxA (S)			113	%	113	(70-130)		
LCS1	13C2-PFHxA (S)		100	113	%	113	(70-130)		
LCS2	13C2-PFHxA (S)		100	110	%	110	(70-130)		
MBLK	13C2-PFHxA (S)			111	%	111	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	111	%	111	(70-130)		
MS2_202011170274	13C2-PFHxA (S)		100	111	%	111	(70-130)		
DUP_202011190376	13C2-PFOA- IS#1 (I)			98.5	%	98	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	98.3	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			98.0	%	98	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
MS2_202011170274	13C2-PFOA- IS#1 (I)		100	96.9	%	97	(50-150)		
DUP_202011190376	13C3-HFPO-DA (S)			105	%	105	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
MBLK	13C3-HFPO-DA (S)			101	%	101	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MS2_202011170274	13C3-HFPO-DA (S)		100	108	%	109	(70-130)		
DUP_202011190376	13C4-PFOS- IS#2 (I)			94.0	%	94	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	94.5	%	94	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	95.5	%	96	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			94.1	%	94	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS2_202011170274	13C4-PFOS- IS#2 (I)		100	93.8	%	94	(50-150)		
DUP_202011190376	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0257	ug/L	109	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0263	ug/L	111	(70-130)	30	2.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00205	ug/L	108	(50-150)		
MS2_202011170274	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0510	ug/L	105	(70-130)		
DUP_202011190376	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0252	ug/L	108	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0255	ug/L	110	(70-130)	30	1.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00188	ug/L	101	(50-150)		
MS2_202011170274	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0489	ug/L	105	(70-130)		
DUP_202011190376	d3-NMeFOSAA (I)			97.9	%	98	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	98.0	%	98	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	96.0	%	96	(50-150)		
MBLK	d3-NMeFOSAA (I)			94.2	%	94	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MS2_202011170274	d3-NMeFOSAA (I)		100	98.2	%	98	(50-150)		
DUP_202011190376	d5-NEtFOSAA (S)			98.8	%	99	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	98.9	%	99	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	99.2	%	99	(70-130)		
MBLK	d5-NEtFOSAA (S)			103	%	103	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	104	%	105	(70-130)		
MS2_202011170274	d5-NEtFOSAA (S)		100	95.1	%	95	(70-130)		
DUP_202011190376	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0258	ug/L	103	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0255	ug/L	102	(70-130)	30	1.2
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00193	ug/L	97	(50-150)		
MS2_202011170274	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0523	ug/L	105	(70-130)		
DUP_202011190376	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0244	ug/L	98	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0252	ug/L	101	(70-130)	30	2.8
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	105	(50-150)		
MS2_202011170274	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0484	ug/L	97	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 904643  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202011190376	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0250	ug/L	100	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0251	ug/L	101	(70-130)	30	0.40
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00205	ug/L	103	(50-150)		
MS2_202011170274	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0474	ug/L	95	(70-130)		
DUP_202011190376	Perfluorobutanesulfonic acid (PFBS)	0.011		0.0112	ug/L		(0-30)	30	0.90
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0260	ug/L	117	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0246	ug/L	111	(70-130)	30	5.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00182	ug/L	103	(50-150)		
MS2_202011170274	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0540	ug/L	122	(70-130)		
DUP_202011190376	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0266	ug/L	107	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0269	ug/L	108	(70-130)	30	0.75
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00216	ug/L	108	(50-150)		
MS2_202011170274	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0558	ug/L	112	(70-130)		
DUP_202011190376	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0256	ug/L	103	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0269	ug/L	108	(70-130)	30	5.0
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00208	ug/L	104	(50-150)		
MS2_202011170274	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0536	ug/L	107	(70-130)		
DUP_202011190376	Perfluoroheptanoic acid (PFHpA)	0.0044		0.00452	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0281	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0291	ug/L	116	(70-130)	30	3.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00228	ug/L	114	(50-150)		
MS2_202011170274	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0601	ug/L	120	(70-130)		
DUP_202011190376	Perfluorohexanesulfonic acid (PFHxS)	0.0043		0.00452	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0259	ug/L	114	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0251	ug/L	110	(70-130)	30	3.1
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00202	ug/L	111	(50-150)		
MS2_202011170274	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0551	ug/L	121	(70-130)		
DUP_202011190376	Perfluorohexanoic acid (PFHxA)	0.0079		0.00785	ug/L		(0-30)	30	1
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0285	ug/L	114	(70-130)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 904643  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0282	ug/L	113	(70-130)	30	1.1
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00218	ug/L	109	(50-150)		
MS2_202011170274	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0628	ug/L	126	(70-130)		
DUP_202011190376	Perfluorononanoic acid (PFNA)	0.0021		0.00222	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0283	ug/L	113	(70-130)	30	1.8
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00218	ug/L	109	(50-150)		
MS2_202011170274	Perfluorononanoic acid (PFNA)	ND	0.05	0.0571	ug/L	114	(70-130)		
DUP_202011190376	Perfluorooctanesulfonic acid (PFOS)	0.014		0.0157	ug/L		(0-30)	30	9.5
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0247	ug/L	107	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0252	ug/L	109	(70-130)	30	2.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00210	ug/L	114	(50-150)		
MS2_202011170274	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0891	ug/L	<b>192</b>	(70-130)		
DUP_202011190376	Perfluorooctanoic acid (PFOA)	0.012		0.0134	ug/L		(0-30)	30	6.7
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0280	ug/L	112	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0283	ug/L	113	(70-130)	30	1.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00221	ug/L	111	(50-150)		
MS2_202011170274	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0682	ug/L	<b>136</b>	(70-130)		
DUP_202011190376	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0302	ug/L	121	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0315	ug/L	126	(70-130)	30	4.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00253	ug/L	126	(50-150)		
MS2_202011170274	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0638	ug/L	127	(70-130)		
DUP_202011190376	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0233	ug/L	93	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0240	ug/L	96	(70-130)	30	3.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00195	ug/L	98	(50-150)		
MS2_202011170274	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0485	ug/L	97	(70-130)		
DUP_202011190376	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0263	ug/L	105	(70-130)	30	2.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00206	ug/L	103	(50-150)		
MS2_202011170274	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0509	ug/L	102	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1289861 Analytical Batch: 1290329

Analysis Date: 11/23/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0510	ug/L	108	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0505	ug/L	107	(70-130)	30	0.99
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00198	ug/L	105	(50-150)		
MS_202011190363	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00195	ug/L	101	(50-150)		
MSD_202011190363	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00196	ug/L	102	(50-150)	50	0.45
LCS3	13C2-PFDA (S)		100	102	%	102	(70-130)		
LCS4	13C2-PFDA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFDA (S)			99.9	%	100	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	102	%	102	(70-130)		
MS_202011190363	13C2-PFDA (S)		100	102	%	102	(70-130)		
MSD_202011190363	13C2-PFDA (S)		100	101	%	101	(70-130)		
LCS3	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS4	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MBLK	13C2-PFHxA (S)			100	%	100	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	100	%	100	(70-130)		
MS_202011190363	13C2-PFHxA (S)		100	98.2	%	98	(70-130)		
MSD_202011190363	13C2-PFHxA (S)		100	97.6	%	98	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	102	%	103	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	97.5	%	97	(50-150)		
MS_202011190363	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MSD_202011190363	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	97.5	%	98	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	96.4	%	96	(70-130)		
MBLK	13C3-HFPO-DA (S)			93.8	%	94	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	96.4	%	96	(70-130)		
MS_202011190363	13C3-HFPO-DA (S)		100	96.7	%	97	(70-130)		
MSD_202011190363	13C3-HFPO-DA (S)		100	95.2	%	95	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.6	%	100	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	98.0	%	98	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			99.5	%	99	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.4	%	98	(50-150)		
MS_202011190363	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
MSD_202011190363	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0504	ug/L	104	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0501	ug/L	103	(70-130)	30	0.60
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00208	ug/L	110	(50-150)		
MS_202011190363	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00206	ug/L	107	(50-150)		
MSD_202011190363	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00206	ug/L	107	(50-150)	50	0.19
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0515	ug/L	110	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0514	ug/L	110	(70-130)	30	0.19
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00207	ug/L	111	(50-150)		
MS_202011190363	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00196	ug/L	102	(50-150)		
MSD_202011190363	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00198	ug/L	104	(50-150)	50	1.1
LCS3	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	98.3	%	98	(50-150)		
MBLK	d3-NMeFOSAA (I)			99.3	%	99	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	97.9	%	98	(50-150)		
MS_202011190363	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MSD_202011190363	d3-NMeFOSAA (I)		100	99.8	%	100	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	98.8	%	99	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	100	%	100	(70-130)		
MBLK	d5-NEtFOSAA (S)			95.0	%	95	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	96.3	%	96	(70-130)		
MS_202011190363	d5-NEtFOSAA (S)		100	97.0	%	97	(70-130)		
MSD_202011190363	d5-NEtFOSAA (S)		100	96.3	%	96	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0521	ug/L	104	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0514	ug/L	103	(70-130)	30	1.4
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202011190363	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00210	ug/L	105	(50-150)		
MSD_202011190363	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00206	ug/L	103	(50-150)	50	1.4
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0529	ug/L	106	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0534	ug/L	107	(70-130)	30	0.94
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00200	ug/L	100	(50-150)		
MS_202011190363	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00238	ug/L	119	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202011190363	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00198	ug/L	99	(50-150)	50	18
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0532	ug/L	106	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0532	ug/L	106	(70-130)	30	0.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	108	(50-150)		
MS_202011190363	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00207	ug/L	104	(50-150)		
MSD_202011190363	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00211	ug/L	105	(50-150)	50	1.8
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0490	ug/L	111	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0477	ug/L	108	(70-130)	30	2.7
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00195	ug/L	110	(50-150)		
MS_202011190363	Perfluorobutanesulfonic acid (PFBS)	0.0071	0.0018	0.00863	ug/L	84	(50-150)		
MSD_202011190363	Perfluorobutanesulfonic acid (PFBS)	0.0071	0.0018	0.00919	ug/L	115	(50-150)	50	6.3
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0555	ug/L	111	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0542	ug/L	108	(70-130)	30	2.4
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00231	ug/L	115	(50-150)		
MS_202011190363	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00328	ug/L	104	(50-150)		
MSD_202011190363	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00332	ug/L	106	(50-150)	50	1.3
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0522	ug/L	105	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0514	ug/L	103	(70-130)	30	1.7
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00217	ug/L	109	(50-150)		
MS_202011190363	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202011190363	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00200	ug/L	100	(50-150)	50	8.0
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0557	ug/L	111	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0538	ug/L	108	(70-130)	30	3.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00221	ug/L	110	(50-150)		
MS_202011190363	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00393	ug/L	105	(50-150)		
MSD_202011190363	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00378	ug/L	97	(50-150)	50	3.9
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0496	ug/L	109	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0502	ug/L	110	(70-130)	30	1.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00210	ug/L	115	(50-150)		
MS_202011190363	Perfluorohexanesulfonic acid (PFHxS)	0.0060	0.0018	0.00775	ug/L	95	(50-150)		
MSD_202011190363	Perfluorohexanesulfonic acid (PFHxS)	0.0060	0.0018	0.00830	ug/L	125	(50-150)	50	6.9
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0532	ug/L	106	(70-130)		

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 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0522	ug/L	104	(70-130)	30	1.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00229	ug/L	115	(50-150)		
MS_202011190363	Perfluorohexanoic acid (PFHxA)	0.0035	0.002	0.00549	ug/L	98	(50-150)		
MSD_202011190363	Perfluorohexanoic acid (PFHxA)	0.0035	0.002	0.00547	ug/L	97	(50-150)	50	0.33
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0544	ug/L	109	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0540	ug/L	108	(70-130)	30	0.74
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00235	ug/L	117	(50-150)		
MS_202011190363	Perfluorononanoic acid (PFNA)	0.0029	0.002	0.00524	ug/L	115	(50-150)		
MSD_202011190363	Perfluorononanoic acid (PFNA)	0.0029	0.002	0.00519	ug/L	112	(50-150)	50	0.89
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0530	ug/L	114	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0518	ug/L	112	(70-130)	30	2.3
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00211	ug/L	114	(50-150)		
MS_202011190363	Perfluorooctanesulfonic acid (PFOS)	0.032	0.0019	0.0331	ug/L	72	(50-150)		
MSD_202011190363	Perfluorooctanesulfonic acid (PFOS)	0.032	0.0019	0.0343	ug/L	140	(50-150)	50	3.6
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0551	ug/L	110	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0551	ug/L	110	(70-130)	30	0.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00274	ug/L	137	(50-150)		
MS_202011190363	Perfluorooctanoic acid (PFOA)	0.012	0.002	0.0143	ug/L	86	(50-150)		
MSD_202011190363	Perfluorooctanoic acid (PFOA)	0.012	0.002	0.0157	ug/L	<b>158</b>	(50-150)	50	9.4
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0615	ug/L	123	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0605	ug/L	121	(70-130)	30	1.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00273	ug/L	137	(50-150)		
MS_202011190363	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00303	ug/L	132	(50-150)		
MSD_202011190363	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00282	ug/L	122	(50-150)	50	7.1
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0528	ug/L	106	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0524	ug/L	105	(70-130)	30	0.76
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202011190363	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00218	ug/L	109	(50-150)		
MSD_202011190363	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00213	ug/L	107	(50-150)	50	2.4
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0541	ug/L	108	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0533	ug/L	107	(70-130)	30	1.5
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

**Report:** 904643  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00222	ug/L	111	(50-150)		
MS_202011190363	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00215	ug/L	100	(50-150)		
MSD_202011190363	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00226	ug/L	105	(50-150)	50	5.1

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 12/03/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 12/03/2020

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_

Project: \_\_\_\_\_  
 Phone #: \_\_\_\_\_  
 Date Received: \_\_\_\_\_  
 Sampled By: \_\_\_\_\_  
 Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
 P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:





Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)\*

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 12/03/2020

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles

REPORT REVISED,  
replaces the original report.



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 904644  
Project: 0250000  
Group: WRD Pilot [Set #1]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

### STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 904644  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **November 19, 2020 at 1416**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date																					
202011190339	LH-INF-20201119	11/19/2020 0918																					
	<table border="1"> <tr> <td>@ANIONS48</td> <td>@VOASDWA</td> <td>Alkalinity in CaCO3 units</td> </tr> <tr> <td>Arsenic Total ICAP/MS</td> <td>Calcium Total ICAP</td> <td>Chloride</td> </tr> <tr> <td>Hexavalent chromium(Dissolved)</td> <td>Iron Total ICAP</td> <td>Magnesium Total ICAP</td> </tr> <tr> <td>Manganese Total ICAP/MS</td> <td>Oil and Grease by 1664(subbed)</td> <td>Perchlorate</td> </tr> <tr> <td>Potassium Total ICAP</td> <td>Sodium Total ICAP</td> <td>Sulfate</td> </tr> <tr> <td>Total Dissolved Solid (TDS)</td> <td>Total Hardness as CaCO3 by ICP</td> <td>Total Organic Carbon</td> </tr> <tr> <td>Total Suspended Solids (TSS)</td> <td>Uranium by ICPMS as pCi/L</td> <td>Uranium ICAP/MS</td> </tr> </table>	@ANIONS48	@VOASDWA	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS	Calcium Total ICAP	Chloride	Hexavalent chromium(Dissolved)	Iron Total ICAP	Magnesium Total ICAP	Manganese Total ICAP/MS	Oil and Grease by 1664(subbed)	Perchlorate	Potassium Total ICAP	Sodium Total ICAP	Sulfate	Total Dissolved Solid (TDS)	Total Hardness as CaCO3 by ICP	Total Organic Carbon	Total Suspended Solids (TSS)	Uranium by ICPMS as pCi/L	Uranium ICAP/MS	
@ANIONS48	@VOASDWA	Alkalinity in CaCO3 units																					
Arsenic Total ICAP/MS	Calcium Total ICAP	Chloride																					
Hexavalent chromium(Dissolved)	Iron Total ICAP	Magnesium Total ICAP																					
Manganese Total ICAP/MS	Oil and Grease by 1664(subbed)	Perchlorate																					
Potassium Total ICAP	Sodium Total ICAP	Sulfate																					
Total Dissolved Solid (TDS)	Total Hardness as CaCO3 by ICP	Total Organic Carbon																					
Total Suspended Solids (TSS)	Uranium by ICPMS as pCi/L	Uranium ICAP/MS																					
202011190340	MB-INF-20201119	11/19/2020 1148																					
	<table border="1"> <tr> <td>@ANIONS48</td> <td>@VOASDWA</td> <td>Alkalinity in CaCO3 units</td> </tr> <tr> <td>Arsenic Total ICAP/MS</td> <td>Calcium Total ICAP</td> <td>Chloride</td> </tr> <tr> <td>Hexavalent chromium(Dissolved)</td> <td>Iron Total ICAP</td> <td>Magnesium Total ICAP</td> </tr> <tr> <td>Manganese Total ICAP/MS</td> <td>Oil and Grease by 1664(subbed)</td> <td>Perchlorate</td> </tr> <tr> <td>Potassium Total ICAP</td> <td>Sodium Total ICAP</td> <td>Sulfate</td> </tr> <tr> <td>Total Dissolved Solid (TDS)</td> <td>Total Hardness as CaCO3 by ICP</td> <td>Total Organic Carbon</td> </tr> <tr> <td>Total Suspended Solids (TSS)</td> <td>Uranium by ICPMS as pCi/L</td> <td>Uranium ICAP/MS</td> </tr> </table>	@ANIONS48	@VOASDWA	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS	Calcium Total ICAP	Chloride	Hexavalent chromium(Dissolved)	Iron Total ICAP	Magnesium Total ICAP	Manganese Total ICAP/MS	Oil and Grease by 1664(subbed)	Perchlorate	Potassium Total ICAP	Sodium Total ICAP	Sulfate	Total Dissolved Solid (TDS)	Total Hardness as CaCO3 by ICP	Total Organic Carbon	Total Suspended Solids (TSS)	Uranium by ICPMS as pCi/L	Uranium ICAP/MS	
@ANIONS48	@VOASDWA	Alkalinity in CaCO3 units																					
Arsenic Total ICAP/MS	Calcium Total ICAP	Chloride																					
Hexavalent chromium(Dissolved)	Iron Total ICAP	Magnesium Total ICAP																					
Manganese Total ICAP/MS	Oil and Grease by 1664(subbed)	Perchlorate																					
Potassium Total ICAP	Sodium Total ICAP	Sulfate																					
Total Dissolved Solid (TDS)	Total Hardness as CaCO3 by ICP	Total Organic Carbon																					
Total Suspended Solids (TSS)	Uranium by ICPMS as pCi/L	Uranium ICAP/MS																					

### Test Description

- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0
- @VOASDWA -- Volatile Organics by GCMS

*424644*

**FROM:**  
GSI Environmental Inc.  
19200 Von Karman Ave, Suite 800  
Irvine, CA 92612  
(949) 679-1070

**TELEPHONE:** (949) 679-1070   **E-MAIL:** mjeon@gsi-net.com

**LABORATORY:** Eurofins Eaton Analytical

**PROJECT NAME:** WRD Pilot

**PROJECT CONTACT:** Miae Jeon

**GLOBAL ID:**

**PROJECT NO.:** 5302

**LAB CONTACT:** Sophia Liang

**SAMPLER(S): (PRINT)**  
*Beckman*

**REQUESTED ANALYSES**  
 Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION			ANALYSES																				
		DATE	TIME			Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)								
		TIME	TIME																										
	GAC-1-20201119	11/19/2020	0830	Water	2		✓																						
	GAC-2-20201119	11/19/2020	0833	Water																									
	GAC-3-20201119	11/19/2020	0836	Water																									
	GAC-4-20201119	11/19/2020	0839	Water																									
	IX-1-20201119	11/19/2020	0842	Water																									
	IX-2-20201119	11/19/2020	0845	Water																									
	IX-3-20201119	11/19/2020	0848	Water																									
	IX-4-20201119	11/19/2020	0851	Water																									
	GAC-1M-20201119	11/19/2020	0854	Water																									
	GAC-2M-20201119	11/19/2020	0857	Water																									
	GAC-3M-20201119	11/19/2020	0900	Water																									
	GAC-4M-20201119	11/19/2020	0903	Water																									
	IX-1M-20201119	11/19/2020	0906	Water																									
	IX-2M-20201119	11/19/2020	0909	Water																									
	IX-3M-20201119	11/19/2020	0912	Water																									
	IX-4M-20201119	11/19/2020	0915	Water																									
	LH-INF-20201119	11/19/2020	0918	Water	14																								

*27-5029*  
*27-5028*

Date: 11/19/20 Time: 1414

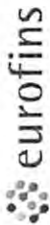
Date: 11/19/20 Time: 1426

Date: \_\_\_\_\_ Time: \_\_\_\_\_



904644

<b>FROM:</b> GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		<b>PROJECT NAME:</b> WRD Pilot <b>PROJECT CONTACT:</b> Miae Jeon <b>GLOBAL ID:</b>		<b>PROJECT NO.:</b> 5302 <b>LAB CONTACT:</b> Sophia Liang <b>SAMPLER(S): (PRINT)</b> Becky Chen		
<b>TEL:</b> (949) 679-1070 <b>E-MAIL:</b> mjeon@gsi-net.com		<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.				
<b>LABORATORY:</b> Eurofins Eaton Analytical <b>TURNAROUND TIME:</b> <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) Alkalinity (as CaCO3), (SM 2320B) Uranium, Arsenic, Manganese (EPA 200.8) Perchlorate (EPA 314.0) Hexavalent Chromium (EPA 218.6) Fe, Na, K, Ca, Mg (EPA 200.7) Total Hardness as CaCO3 (SM 2340B) VOCs (EPA 524.2) TOC (SM 5310C) TDS (EPA 160.1/SM 2540C) TSS (SM 2540D) Oil & Grease (EPA 1664)				
<b>SPECIAL INSTRUCTIONS:</b> Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdorres@gsi-net.com; Provide EDD of sample results		PFAS - full list (EPA 537.1) <input type="checkbox"/> Field Filtered <input type="checkbox"/> Preserved <input type="checkbox"/> Unpreserved <input checked="" type="checkbox"/>				
<b>LAB USE ONLY</b>	<b>SAMPLE ID</b>	<b>DATE</b>	<b>SAMPLING TIME</b>	<b>MATRIX</b>	<b>NO. OF CONT.</b>	<b>Requested Analytes</b>
	IX-5-20201119	11/19/2020	1100	Water	2	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	IX-6-20201119	11/19/2020	1103	Water	1	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	IX-7-20201119	11/19/2020	1106	Water	1	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	IX-8-20201119	11/19/2020	1109	Water	1	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	GAC-5-20201119	11/19/2020	1112	Water	1	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	GAC-6-20201119	11/19/2020	1115	Water	1	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	GAC-7-20201119	11/19/2020	1118	Water	1	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	GAC-8-20201119	11/19/2020	1121	Water	1	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	IX-5M-20201119	11/19/2020	1124	Water	1	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	IX-6M-20201119	11/19/2020	1127	Water	1	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	IX-7M-20201119	11/19/2020	1130	Water	1	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	IX-8M-20201119	11/19/2020	1133	Water	1	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	GAC-5M-20201119	11/19/2020	1136	Water	1	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	GAC-6M-20201119	11/19/2020	1139	Water	1	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	GAC-7M-20201119	11/19/2020	1142	Water	1	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	GAC-8M-20201119	11/19/2020	1145	Water	1	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
	MB-INF-20201119	11/19/2020	1148	Water	14	<input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> Uranium, Arsenic, Manganese (EPA 200.8) <input checked="" type="checkbox"/> Perchlorate (EPA 314.0) <input checked="" type="checkbox"/> Hexavalent Chromium (EPA 218.6) <input checked="" type="checkbox"/> Fe, Na, K, Ca, Mg (EPA 200.7) <input checked="" type="checkbox"/> Total Hardness as CaCO3 (SM 2340B) <input checked="" type="checkbox"/> VOCs (EPA 524.2) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> TDS (EPA 160.1/SM 2540C) <input checked="" type="checkbox"/> TSS (SM 2540D) <input checked="" type="checkbox"/> Oil & Grease (EPA 1664)
Relinquished by: (Signature)		Received by: (Signature)		Date: <u>11/19/20</u> Time: <u>1:44</u>		
Relinquished by: (Signature)		Received by: (Signature)		Date: <u>11/19/20</u> Time: <u>1:16</u>		
Relinquished by: (Signature)		Received by: (Signature)		Date: <u>11/19/20</u> Time: <u>1:16</u>		



Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

### SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 668A (Observation=4.0 °C) (Corr.Factor=2 °C) (Final # 4.8 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Condition of ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) **Chemistry:** >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) **Microbiology, Distribution:** < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) **Microbiology, Surface Water:** < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)	2 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)
3 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)	4 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_  
6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) VOA and Radon Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

### Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @C-H, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm
0340	6	1	1				
0340	7	1	1				
0340	8	1	1				

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: 	PRINT NAME: _____	COMPANY/TITLE: Eurofins Eaton Analytical	DATE: <u>6/19/20</u>	TIME: <u>14:16</u>
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Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Report:** 904644  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

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**Folder Comments**

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove, CAELAP 2944 exp 9-30-2021

REVISED REPORT. UPDATE SAMPLE ID PER CLIENT. SFL 01/14/2021.

**Flags Legend:**

J - Analyte is positively identified, but tentatively quantified as an estimate concentration. The analyte was either detected between MDL and MRL or did not meet any one of the required QC criteria.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904644  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202011190339</b>	<b><u>LH-INF-20201119</u></b>			
11/24/2020 01:12	Alkalinity in CaCO3 units		200		mg/L	2.0
12/08/2020 22:22	Arsenic Total ICAP/MS		2.9	10	ug/L	1.0
11/24/2020 13:03	Calcium Total ICAP		110		mg/L	1.0
11/20/2020 03:33	Chloride		100	250	mg/L	2.5
11/23/2020 16:15	Chloroform (Trichloromethane)		0.64		ug/L	0.50
11/24/2020 13:28	Hexavalent chromium(Dissolved)		0.69		ug/L	0.020
11/24/2020 13:03	Magnesium Total ICAP		21		mg/L	0.10
11/20/2020 03:33	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
11/20/2020 03:33	Nitrate as NO3 (calc)		12	45	mg/L	2.2
11/24/2020 13:03	Potassium Total ICAP		4.7		mg/L	1.0
11/24/2020 13:03	Sodium Total ICAP		69		mg/L	1.0
11/20/2020 03:33	Sulfate		170	250	mg/L	2.5
11/26/2020 15:12	Total Dissolved Solids (TDS)		630	500	mg/L	10
11/24/2020 14:30	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
11/20/2020 03:33	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
12/12/2020 12:15	Total Organic Carbon		0.58		mg/L	0.20
11/23/2020 16:15	Total THM		0.64	80	ug/L	0.50
12/07/2020 14:15	Uranium by ICPMS as pCi/L		2.8		pCi/L	0.70
12/04/2020 19:26	Uranium ICAP/MS		4.2	30	ug/L	1.0
		<b>202011190340</b>	<b><u>MB-INF-20201119</u></b>			
11/24/2020 01:04	Alkalinity in CaCO3 units		160		mg/L	2.0
12/08/2020 22:25	Arsenic Total ICAP/MS		1.4	10	ug/L	1.0
11/24/2020 18:18	Calcium Total ICAP		64		mg/L	1.0
11/20/2020 03:46	Chloride		45	250	mg/L	2.5
11/24/2020 13:38	Hexavalent chromium(Dissolved)		0.48		ug/L	0.020
11/24/2020 18:18	Magnesium Total ICAP		12		mg/L	0.10
11/20/2020 03:46	Nitrate as Nitrogen by IC		2.6	10	mg/L	0.50
11/20/2020 03:46	Nitrate as NO3 (calc)		12	45	mg/L	2.2
11/24/2020 18:18	Potassium Total ICAP		4.0		mg/L	1.0
11/24/2020 18:18	Sodium Total ICAP		53		mg/L	1.0
11/20/2020 03:46	Sulfate		71	250	mg/L	2.5
11/26/2020 15:13	Total Dissolved Solids (TDS)		370	500	mg/L	10
11/24/2020 20:31	Total Hardness as CaCO3 by ICP (calc)		210		mg/L	3.0
11/20/2020 03:46	Total Nitrate, Nitrite-N, CALC		2.6		mg/L	0.10
12/12/2020 12:37	Total Organic Carbon		0.79		mg/L	0.20

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
Fax: (626) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Report:** 904644  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

**Water Replenishment District**  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

Samples Received on:  
11/19/2020 1416

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
12/07/2020 14:15	Uranium by ICPMS as pCi/L		1.3		pCi/L	0.70
12/04/2020 19:29	Uranium ICAP/MS		1.9	30	ug/L	1.0

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 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution	
<b>LH-INF-20201119 (202011190339)</b>					<b>Sampled on 11/19/2020 0918</b>					
<b>EPA 200.8 - ICPMS Metals</b>										
11/20/20	12/08/20 22:22	1289519	1292914	(EPA 200.8)	Arsenic Total ICAP/MS	2.9	ug/L	1.0	1	
11/20/20	12/04/20 19:26	1289519	1291470	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1	
11/20/20	12/04/20 19:26	1289519	1291470	(EPA 200.8)	Uranium ICAP/MS	4.2	ug/L	1.0	1	
<b>EPA 200.7 - ICP Metals</b>										
11/20/20	11/24/20 13:03	1289519	1290274	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1	
11/20/20	11/24/20 13:03	1289519	1290274	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1	
11/20/20	11/24/20 13:03	1289519	1290274	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1	
11/20/20	11/24/20 13:03	1289519	1290274	(EPA 200.7)	Potassium Total ICAP	4.7	mg/L	1.0	1	
11/20/20	11/24/20 13:03	1289519	1290274	(EPA 200.7)	Sodium Total ICAP	69	mg/L	1.0	1	
<b>SM 5310C - Total Organic Carbon</b>										
12/12/20	12:15		1293760	(SM 5310C)	Total Organic Carbon	0.58	mg/L	0.20	1	
<b>EPA 200.8 - Uranium by ICPMS as pCi/L</b>										
12/07/20	14:15			(EPA 200.8)	Uranium by ICPMS as pCi/L	2.8 (c)	pCi/L	0.70	1	
<b>SM 2340B - Total Hardness as CaCO3 by ICP</b>										
11/24/20	14:30			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1	
<b>EPA 218.6 - Hexavalent chromium(Dissolved)</b>										
11/24/20	13:28		1290657	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.69	ug/L	0.020	1	
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>										
11/20/20	03:33		1289446	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5	
11/20/20	03:33		1289446	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5	
11/20/20	03:33		1289446	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5	
11/20/20	03:33		1289446	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1	
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>										
11/20/20	03:33		1289447	(EPA 300.0)	Chloride	100	mg/L	2.5	5	
11/20/20	03:33		1289447	(EPA 300.0)	Sulfate	170	mg/L	2.5	5	
<b>EPA 314.0 - Perchlorate</b>										
11/20/20	18:41	(1)	1290017	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1	
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>										
11/28/20	12:49			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.98	1	
<b>EPA 524.2 - Volatile Organics by GCMS</b>										
11/23/20	11/23/20 16:15		1290249	1290251	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15		1290249	1290251	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15		1290249	1290251	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15		1290249	1290251	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1

Rounding on totals after summation.  
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Report: 904644  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Chloroform (Trichloromethane)	0.64	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1

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 1 800 566 LABS (1 800 566 5227)

Report: 904644  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Total THM	0.64	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,2-Dichloroethane-d4	103	%		1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	4-Bromofluorobenzene	103	%		1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Toluene-d8	95	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	11/24/20 01:12		1290332	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
11/25/20	11/26/20 15:12	1290865	1290866	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	630	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	11/25/20 01:22		1290534	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1

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Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution	
<b>MB-INF-20201119 (202011190340)</b>					<b>Sampled on 11/19/2020 1148</b>					
<b>EPA 200.8 - ICPMS Metals</b>										
11/20/20	12/08/20 22:25	1289519	1292914	(EPA 200.8)	Arsenic Total ICAP/MS	1.4	ug/L	1.0	1	
11/20/20	12/04/20 19:29	1289519	1291470	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1	
11/20/20	12/04/20 19:29	1289519	1291470	(EPA 200.8)	Uranium ICAP/MS	1.9	ug/L	1.0	1	
<b>EPA 200.7 - ICP Metals</b>										
11/20/20	11/24/20 18:18	1289519	1290275	(EPA 200.7)	Calcium Total ICAP	64	mg/L	1.0	1	
11/20/20	11/24/20 18:18	1289519	1290275	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1	
11/20/20	11/24/20 18:18	1289519	1290275	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	0.10	1	
11/20/20	11/24/20 18:18	1289519	1290275	(EPA 200.7)	Potassium Total ICAP	4.0	mg/L	1.0	1	
11/20/20	11/24/20 18:18	1289519	1290275	(EPA 200.7)	Sodium Total ICAP	53	mg/L	1.0	1	
<b>SM 5310C - Total Organic Carbon</b>										
12/12/20	12:37		1293760	(SM 5310C)	Total Organic Carbon	0.79	mg/L	0.20	1	
<b>EPA 200.8 - Uranium by ICPMS as pCi/L</b>										
12/07/20	14:15			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.3 (c)	pCi/L	0.70	1	
<b>SM 2340B - Total Hardness as CaCO3 by ICP</b>										
11/24/20	20:31			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	210 (c)	mg/L	3.0	1	
<b>EPA 218.6 - Hexavalent chromium(Dissolved)</b>										
11/24/20	13:38		1290657	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.48	ug/L	0.020	1	
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>										
11/20/20	03:46		1289446	(EPA 300.0)	Nitrate as Nitrogen by IC	2.6	mg/L	0.50	5	
11/20/20	03:46		1289446	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5	
11/20/20	03:46		1289446	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5	
11/20/20	03:46		1289446	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.6	mg/L	0.10	1	
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>										
11/20/20	03:46		1289447	(EPA 300.0)	Chloride	45	mg/L	2.5	5	
11/20/20	03:46		1289447	(EPA 300.0)	Sulfate	71	mg/L	2.5	5	
<b>EPA 314.0 - Perchlorate</b>										
11/20/20	19:30	(1)	1290017	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1	
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>										
11/28/20	12:49			(EPA 1664)	Oil and Grease by 1664(subbed)	ND (J)	mg/L	0.97	1	
<b>EPA 524.2 - Volatile Organics by GCMS</b>										
11/23/20	11/23/20 22:04		1290249	1290251	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04		1290249	1290251	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04		1290249	1290251	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04		1290249	1290251	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1

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Tel: (626) 386-1100  
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Report: 904644  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1

Rounding on totals after summation.  
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Report: 904644  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,2-Dichloroethane-d4	100	%		1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	4-Bromofluorobenzene	105	%		1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Toluene-d8	96	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	11/24/20 01:04		1290332	(SM 2320B)	Alkalinity in CaCO3 units	160	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
11/25/20	11/26/20 15:13	1290865	1290866	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	370	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	11/25/20 01:23		1290534	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1

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**Report:** 904644  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District

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**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1289446**

202011190339 LH-INF-20201119  
 202011190340 MB-INF-20201119

**Analysis Date: 11/20/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1289447**

202011190339 LH-INF-20201119  
 202011190340 MB-INF-20201119

**Analysis Date: 11/20/2020**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Perchlorate**

**Analytical Batch: 1290017**

202011190339 LH-INF-20201119  
 202011190340 MB-INF-20201119

**Analysis Date: 11/20/2020**

Analyzed by: H5VG  
 Analyzed by: H5VG

**Volatile Organics by GCMS**

**Prep Batch: 1290249 Analytical Batch: 1290251**

202011190339 LH-INF-20201119  
 202011190340 MB-INF-20201119

**Analysis Date: 11/23/2020**

Analyzed by: TR7W  
 Analyzed by: TR7W

**ICP Metals**

**Prep Batch: 1289519 Analytical Batch: 1290274**

202011190339 LH-INF-20201119

**Analysis Date: 11/24/2020**

Analyzed by: NINA

**ICP Metals**

**Prep Batch: 1289519 Analytical Batch: 1290275**

202011190340 MB-INF-20201119

**Analysis Date: 11/24/2020**

Analyzed by: Y7TT

**Alkalinity in CaCO3 units**

**Analytical Batch: 1290332**

202011190339 LH-INF-20201119  
 202011190340 MB-INF-20201119

**Analysis Date: 11/24/2020**

Analyzed by: ZS6I  
 Analyzed by: ZS6I

**Total Suspended Solids (TSS)**

**Analytical Batch: 1290534**

202011190339 LH-INF-20201119  
 202011190340 MB-INF-20201119

**Analysis Date: 11/25/2020**

Analyzed by: TJ52  
 Analyzed by: TJ52

**Hexavalent chromium(Dissolved)**

**Analytical Batch: 1290657**

202011190339 LH-INF-20201119  
 202011190340 MB-INF-20201119

**Analysis Date: 11/24/2020**

Analyzed by: TLH  
 Analyzed by: TLH

**Total Dissolved Solids (TDS)**

**Prep Batch: 1290865 Analytical Batch: 1290866**

202011190339 LH-INF-20201119  
 202011190340 MB-INF-20201119

**Analysis Date: 11/26/2020**

Analyzed by: TJ52  
 Analyzed by: TJ52

**ICPMS Metals**

**Prep Batch: 1289519 Analytical Batch: 1291470**

**Analysis Date: 12/04/2020**

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**Report:** 904644  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

## Water Replenishment District

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202011190339	LH-INF-20201119
202011190340	MB-INF-20201119

Analyzed by: AZS  
Analyzed by: AZS

## ICPMS Metals

**Prep Batch: 1289519 Analytical Batch: 1292914**

**Analysis Date: 12/08/2020**

202011190339	LH-INF-20201119
202011190340	MB-INF-20201119

Analyzed by: AZS  
Analyzed by: AZS

## Total Organic Carbon

**Analytical Batch: 1293760**

**Analysis Date: 12/12/2020**

202011190339	LH-INF-20201119
202011190340	MB-INF-20201119

Analyzed by: ZB2Z  
Analyzed by: ZB2Z

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
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Report: 904644  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1289446</b>					<b>Analysis Date: 11/20/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.48	mg/L	99	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.46	mg/L	99	(90-110)	20	0.81
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0490	mg/L	98	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0123	mg/L	98	(50-150)		
MS_202011190295	Nitrate as Nitrogen by IC	0.11	1.3	1.49	mg/L	110	(80-120)		
MSD_202011190295	Nitrate as Nitrogen by IC	0.11	1.3	1.52	mg/L	113	(80-120)	20	2.1
LCS1	Nitrite Nitrogen by IC		1	0.994	mg/L	99	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.990	mg/L	99	(90-110)	20	0.40
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0537	mg/L	107	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0130	mg/L	104	(50-150)		
MS_202011190295	Nitrite Nitrogen by IC	ND	0.5	0.398	mg/L	80	(80-120)		
MSD_202011190295	Nitrite Nitrogen by IC	ND	0.5	0.413	mg/L	83	(80-120)	20	3.7
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1289447</b>					<b>Analysis Date: 11/20/2020</b>				
LCS1	Chloride		25	25.4	mg/L	102	(90-110)		
LCS2	Chloride		25	25.2	mg/L	101	(90-110)	20	0.79
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.446	mg/L	89	(50-150)		
MS_202011180511	Chloride	10	13	24.2	mg/L	110	(80-120)		
MS_202011190295	Chloride	8.2	13	22.0	mg/L	110	(80-120)		
MSD_202011180511	Chloride	10	13	24.2	mg/L	111	(80-120)	20	0.52
MSD_202011190295	Chloride	8.2	13	22.3	mg/L	112	(80-120)	20	1.5
LCS1	Sulfate		50	51.2	mg/L	102	(90-110)		
LCS2	Sulfate		50	50.8	mg/L	102	(90-110)	20	0.59
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.932	mg/L	93	(50-150)		
MRL_W	Sulfate		0.25	0.230	mg/L	92	(50-150)		
MS_202011180511	Sulfate	0.8	25	27.0	mg/L	105	(80-120)		
MS_202011190295	Sulfate	8.6	25	35.4	mg/L	107	(80-120)		
MSD_202011180511	Sulfate	0.8	25	27.2	mg/L	106	(80-120)	20	0.55
MSD_202011190295	Sulfate	8.6	25	36.2	mg/L	110	(80-120)	20	2.1

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 904644  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Perchlorate by EPA 314.0</b>									
<b>Analytical Batch: 1290017</b>					<b>Analysis Date: 11/20/2020</b>				
LCS1	Perchlorate		25	25.4	ug/L	102	(85-115)		
LCS2	Perchlorate		25	25.6	ug/L	102	(85-115)	15	0.78
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	3.71	ug/L	93	(75-125)		
MS_202011190102	Perchlorate	ND	25	24.2	ug/L	97	(80-120)		
MSD_202011190102	Perchlorate	ND	25	24.6	ug/L	98	(80-120)	15	1.6
<b>Volatile Organics by GCMS by EPA 524.2</b>									
<b>Analytical Batch: 1290251</b>					<b>Analysis Date: 11/23/2020</b>				
LCS1	1,1,1,2-Tetrachloroethane		5	4.66	ug/L	93	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	4.50	ug/L	90	(70-130)	20	3.5
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.79	ug/L	96	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.66	ug/L	93	(70-130)	20	2.8
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.450	ug/L	90	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	4.86	ug/L	97	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	4.83	ug/L	97	(70-130)	20	0.62
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.84	ug/L	97	(70-130)		
LCS2	1,1,2-Trichloroethane		5	4.66	ug/L	93	(70-130)	20	3.8
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,1-Dichloroethane		5	5.05	ug/L	101	(70-130)		
LCS2	1,1-Dichloroethane		5	4.89	ug/L	98	(70-130)	20	3.2
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	1,1-Dichloroethylene		5	5.31	ug/L	106	(70-130)		
LCS2	1,1-Dichloroethylene		5	5.00	ug/L	100	(70-130)	20	6.0
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1-Dichloropropene		5	4.89	ug/L	98	(70-130)		
LCS2	1,1-Dichloropropene		5	4.90	ug/L	98	(70-130)	20	0.20
MBLK	1,1-Dichloropropene			<0.5	ug/L				

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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 1 800 566 LABS (1 800 566 5227)

Report: 904644  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	1,1-Dichloropropene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.84	ug/L	97	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	4.88	ug/L	98	(70-130)	20	0.82
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.560	ug/L	112	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.11	ug/L	102	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.09	ug/L	102	(70-130)	20	0.39
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.560	ug/L	112	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.86	ug/L	97	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	5.02	ug/L	100	(70-130)	20	3.2
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	5.34	ug/L	107	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	5.00	ug/L	100	(70-130)	20	6.6
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	1,2-Dichloroethane		5	4.90	ug/L	98	(70-130)		
LCS2	1,2-Dichloroethane		5	4.62	ug/L	92	(70-130)	20	5.9
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	99.2	%	99	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	105	%	105	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			99.2	%	99	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
LCS1	1,2-Dichloropropane		5	4.71	ug/L	94	(70-130)		
LCS2	1,2-Dichloropropane		5	4.75	ug/L	95	(70-130)	20	0.85
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.440	ug/L	88	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	5.33	ug/L	107	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.88	ug/L	98	(70-130)	20	8.8
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.460	ug/L	92	(50-150)		
LCS1	1,3-Dichloropropane		5	4.92	ug/L	98	(70-130)		
LCS2	1,3-Dichloropropane		5	4.76	ug/L	95	(70-130)	20	3.3
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.470	ug/L	94	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 904644  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	2,2-Dichloropropane		5	5.09	ug/L	102	(70-130)		
LCS2	2,2-Dichloropropane		5	5.14	ug/L	103	(70-130)	20	0.98
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.530	ug/L	106	(50-150)		
LCS1	2-Butanone (MEK)		50	42.6	ug/L	85	(70-130)		
LCS2	2-Butanone (MEK)		50	42.3	ug/L	85	(70-130)	20	0.71
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	4.97	ug/L	99	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	109	%	109	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	110	%	110	(70-130)		
MBLK	4-Bromofluorobenzene (S)			104	%	104	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	105	%	105	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	105	%	105	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	44.4	ug/L	89	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	44.7	ug/L	90	(70-130)	20	0.67
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.33	ug/L	87	(50-150)		
LCS1	Benzene		5	4.98	ug/L	100	(70-130)		
LCS2	Benzene		5	4.93	ug/L	99	(70-130)	20	1.0
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Bromobenzene		5	5.22	ug/L	104	(70-130)		
LCS2	Bromobenzene		5	5.15	ug/L	103	(70-130)	20	1.4
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.520	ug/L	104	(50-150)		
LCS1	Bromochloromethane		5	4.92	ug/L	98	(70-130)		
LCS2	Bromochloromethane		5	4.93	ug/L	99	(70-130)	20	0.20
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	Bromodichloromethane		5	4.92	ug/L	98	(70-130)		
LCS2	Bromodichloromethane		5	4.73	ug/L	95	(70-130)	20	3.9
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	Bromoethane		5	5.36	ug/L	107	(70-130)		
LCS2	Bromoethane		5	5.13	ug/L	103	(70-130)	20	4.4
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Bromoform		5	4.94	ug/L	99	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 904644  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Bromoform		5	4.67	ug/L	93	(70-130)	20	5.6
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.430	ug/L	86	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.44	ug/L	109	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	4.73	ug/L	95	(70-130)	20	14
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.660	ug/L	132	(50-150)		
LCS1	Carbon disulfide		5	5.00	ug/L	100	(70-130)		
LCS2	Carbon disulfide		5	4.50	ug/L	90	(70-130)	20	11
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.520	ug/L	104	(50-150)		
LCS1	Carbon Tetrachloride		5	5.05	ug/L	101	(70-130)		
LCS2	Carbon Tetrachloride		5	4.89	ug/L	98	(70-130)	20	3.2
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.490	ug/L	98	(50-150)		
LCS1	Chlorobenzene		5	4.95	ug/L	99	(70-130)		
LCS2	Chlorobenzene		5	4.85	ug/L	97	(70-130)	20	2.0
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Chlorodibromomethane		5	4.79	ug/L	96	(70-130)		
LCS2	Chlorodibromomethane		5	4.54	ug/L	91	(70-130)	20	5.4
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.440	ug/L	88	(50-150)		
LCS1	Chloroethane		5	5.11	ug/L	102	(70-130)		
LCS2	Chloroethane		5	4.89	ug/L	98	(70-130)	20	4.4
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.560	ug/L	112	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	5.05	ug/L	101	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	5.03	ug/L	101	(70-130)	20	0.40
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.76	ug/L	95	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.43	ug/L	89	(70-130)	20	7.2
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.580	ug/L	116	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.98	ug/L	100	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.92	ug/L	98	(70-130)	20	1.2
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.500	ug/L	100	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.71	ug/L	94	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.57	ug/L	91	(70-130)	20	3.0
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.440	ug/L	88	(50-150)		
LCS1	Dibromomethane		5	4.67	ug/L	93	(70-130)		
LCS2	Dibromomethane		5	4.72	ug/L	94	(70-130)	20	1.1
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	Dichlorodifluoromethane		5	5.23	ug/L	105	(70-130)		
LCS2	Dichlorodifluoromethane		5	4.74	ug/L	95	(70-130)	20	9.8
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	Dichloromethane		5	5.07	ug/L	101	(70-130)		
LCS2	Dichloromethane		5	4.87	ug/L	97	(70-130)	20	4.0
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.670	ug/L	134	(50-150)		
LCS1	Di-isopropyl ether		5	4.76	ug/L	95	(70-130)		
LCS2	Di-isopropyl ether		5	4.74	ug/L	95	(70-130)	20	0.42
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.500	ug/L	100	(50-150)		
LCS1	Ethyl benzene		5	5.07	ug/L	101	(70-130)		
LCS2	Ethyl benzene		5	4.96	ug/L	99	(70-130)	20	2.2
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Hexachlorobutadiene		5	4.88	ug/L	98	(70-130)		
LCS2	Hexachlorobutadiene		5	4.95	ug/L	99	(70-130)	20	1.4
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.580	ug/L	116	(50-150)		
LCS1	Isopropylbenzene		5	5.35	ug/L	107	(70-130)		
LCS2	Isopropylbenzene		5	5.30	ug/L	106	(70-130)	20	0.94
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.490	ug/L	98	(50-150)		
LCS1	m,p-Xylenes		10	10.2	ug/L	102	(70-130)		
LCS2	m,p-Xylenes		10	9.85	ug/L	99	(70-130)	20	3.5
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.900	ug/L	90	(50-150)		
MRLW	m,p-Xylenes		0.5	0.510	ug/L	102	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	m-Dichlorobenzene (1,3-DCB)		5	5.33	ug/L	107	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	5.22	ug/L	104	(70-130)	20	2.1
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.510	ug/L	102	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	4.85	ug/L	97	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	4.86	ug/L	97	(70-130)	20	0.21
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.670	ug/L	134	(50-150)		
LCS1	Naphthalene		5	4.68	ug/L	94	(70-130)		
LCS2	Naphthalene		5	4.89	ug/L	98	(70-130)	20	4.4
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.510	ug/L	102	(50-150)		
LCS1	n-Butylbenzene		5	5.10	ug/L	102	(70-130)		
LCS2	n-Butylbenzene		5	5.00	ug/L	100	(70-130)	20	2.0
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.460	ug/L	92	(50-150)		
LCS1	n-Propylbenzene		5	5.40	ug/L	108	(70-130)		
LCS2	n-Propylbenzene		5	5.16	ug/L	103	(70-130)	20	4.5
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.490	ug/L	98	(50-150)		
LCS1	o-Chlorotoluene		5	5.44	ug/L	109	(70-130)		
LCS2	o-Chlorotoluene		5	5.18	ug/L	104	(70-130)	20	4.9
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.530	ug/L	106	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.86	ug/L	97	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	5.02	ug/L	100	(70-130)	20	3.2
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.520	ug/L	104	(50-150)		
LCS1	o-Xylene		5	4.97	ug/L	99	(70-130)		
LCS2	o-Xylene		5	4.63	ug/L	93	(70-130)	20	7.1
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.450	ug/L	90	(50-150)		
LCS1	p-Chlorotoluene		5	5.29	ug/L	106	(70-130)		
LCS2	p-Chlorotoluene		5	5.19	ug/L	104	(70-130)	20	1.9
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.520	ug/L	104	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	5.32	ug/L	106	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.26	ug/L	105	(70-130)	20	1.1

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 904644  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.520	ug/L	104	(50-150)		
LCS1	p-Isopropyltoluene		5	5.42	ug/L	108	(70-130)		
LCS2	p-Isopropyltoluene		5	5.26	ug/L	105	(70-130)	20	3.0
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.490	ug/L	98	(50-150)		
LCS1	sec-Butylbenzene		5	5.37	ug/L	107	(70-130)		
LCS2	sec-Butylbenzene		5	5.41	ug/L	108	(70-130)	20	0.74
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Styrene		5	4.66	ug/L	93	(70-130)		
LCS2	Styrene		5	4.05	ug/L	81	(70-130)	20	14
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.430	ug/L	86	(50-150)		
LCS1	tert-amyl Methyl Ether		5	4.61	ug/L	92	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.75	ug/L	95	(70-130)	20	3.0
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.470	ug/L	94	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	4.82	ug/L	96	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	4.72	ug/L	94	(70-130)	20	2.1
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.480	ug/L	96	(50-150)		
LCS1	tert-Butylbenzene		5	5.27	ug/L	105	(70-130)		
LCS2	tert-Butylbenzene		5	5.35	ug/L	107	(70-130)	20	1.5
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.490	ug/L	98	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	5.09	ug/L	102	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.96	ug/L	99	(70-130)	20	2.6
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Toluene		5	4.92	ug/L	98	(70-130)		
LCS2	Toluene		5	4.79	ug/L	96	(70-130)	20	2.7
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Toluene-d8 (S)		5	99.0	%	99	(70-130)		
LCS2	Toluene-d8 (S)		5	102	%	102	(70-130)		
MBLK	Toluene-d8 (S)			95.4	%	95	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	97.6	%	98	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 904644  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRLW	Toluene-d8 (S)		5	97.6	%	98	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	5.09	ug/L	102	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	4.83	ug/L	97	(70-130)	20	5.2
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.540	ug/L	108	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.50	ug/L	90	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.47	ug/L	89	(70-130)	20	0.67
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.420	ug/L	84	(50-150)		
LCS1	Trichloroethylene (TCE)		5	5.00	ug/L	100	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.70	ug/L	94	(70-130)	20	6.2
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.500	ug/L	100	(50-150)		
LCS1	Trichlorofluoromethane		5	5.28	ug/L	106	(70-130)		
LCS2	Trichlorofluoromethane		5	5.00	ug/L	100	(70-130)	20	5.5
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	5.32	ug/L	106	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	5.21	ug/L	104	(70-130)	20	2.1
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Vinyl chloride (VC)		5	5.26	ug/L	105	(70-130)		
LCS2	Vinyl chloride (VC)		5	4.98	ug/L	100	(70-130)	20	5.5
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.530	ug/L	106	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.240	ug/L	96	(50-150)		

ICP Metals by EPA 200.7

Analytical Batch: 1290274

Analysis Date: 11/24/2020

LCS1	Calcium Total ICAP		50	43.8	mg/L	88	(85-115)		
LCS2	Calcium Total ICAP		50	43.7	mg/L	87	(85-115)	20	0.23
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.995	mg/L	100	(50-150)		
MS_202011230130	Calcium Total ICAP	20	50	70.3	mg/L	100	(70-130)		
MS2_202011190296	Calcium Total ICAP	5.2	50	55.4	mg/L	100	(70-130)		
MSD_202011230130	Calcium Total ICAP	20	50	69.4	mg/L	98	(70-130)	20	1.3
MSD2_202011190296	Calcium Total ICAP	5.2	50	55.3	mg/L	100	(70-130)	20	0.24
LCS1	Iron Total ICAP		5	4.36	mg/L	87	(85-115)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 904644  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Iron Total ICAP		5	4.34	mg/L	87	(85-115)	20	0.46
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0203	mg/L	101	(50-150)		
MS_202011230130	Iron Total ICAP	ND	5	5.12	mg/L	102	(70-130)		
MS2_202011190296	Iron Total ICAP	0.043	5	5.05	mg/L	100	(70-130)		
MSD_202011230130	Iron Total ICAP	ND	5	5.05	mg/L	101	(70-130)	20	1.4
MSD2_202011190296	Iron Total ICAP	0.043	5	5.03	mg/L	100	(70-130)	20	0.38
LCS1	Magnesium Total ICAP		20	17.3	mg/L	87	(85-115)		
LCS2	Magnesium Total ICAP		20	17.2	mg/L	86	(85-115)	20	0.0
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0982	mg/L	98	(50-150)		
MS_202011230130	Magnesium Total ICAP	7.1	20	27.5	mg/L	102	(70-130)		
MS2_202011190296	Magnesium Total ICAP	1.2	20	21.3	mg/L	101	(70-130)		
MSD_202011230130	Magnesium Total ICAP	7.1	20	27.1	mg/L	100	(70-130)	20	1.4
MSD2_202011190296	Magnesium Total ICAP	1.2	20	21.2	mg/L	100	(70-130)	20	0.13
LCS1	Potassium Total ICAP		20	17.8	mg/L	89	(85-115)		
LCS2	Potassium Total ICAP		20	17.8	mg/L	89	(85-115)	20	0.0
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.715	mg/L	72	(50-150)		
MS_202011230130	Potassium Total ICAP	ND	20	22.4	mg/L	108	(70-130)		
MS2_202011190296	Potassium Total ICAP	1.5	20	22.4	mg/L	104	(70-130)		
MSD_202011230130	Potassium Total ICAP	ND	20	22.2	mg/L	106	(70-130)	20	1.0
MSD2_202011190296	Potassium Total ICAP	1.5	20	22.4	mg/L	104	(70-130)	20	0.0058
LCS1	Sodium Total ICAP		50	43.6	mg/L	87	(85-115)		
LCS2	Sodium Total ICAP		50	43.4	mg/L	87	(85-115)	20	0.46
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.980	mg/L	98	(50-150)		
MS_202011230130	Sodium Total ICAP	27	50	75.3	mg/L	97	(70-130)		
MS2_202011190296	Sodium Total ICAP	6.1	50	54.9	mg/L	98	(70-130)		
MSD_202011230130	Sodium Total ICAP	27	50	74.3	mg/L	95	(70-130)	20	1.3
MSD2_202011190296	Sodium Total ICAP	6.1	50	54.7	mg/L	97	(70-130)	20	0.40

ICP Metals by EPA 200.7

Analytical Batch: 1290275

Analysis Date: 11/24/2020

LCS1	Calcium Total ICAP		50	51.4	mg/L	103	(85-115)		
LCS2	Calcium Total ICAP		50	50.8	mg/L	102	(85-115)	20	1.2
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	1.00	mg/L	100	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 904644  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202011200148	Calcium Total ICAP	33	50	83.8	mg/L	101	(70-130)		
MS2_202011190483	Calcium Total ICAP	ND	50	51.8	mg/L	104	(70-130)		
MSD_202011200148	Calcium Total ICAP	33	50	83.4	mg/L	100	(70-130)	20	0.54
MSD2_202011190483	Calcium Total ICAP	ND	50	51.9	mg/L	104	(70-130)	20	0.17
LCS1	Iron Total ICAP		5	5.16	mg/L	103	(85-115)		
LCS2	Iron Total ICAP		5	5.10	mg/L	102	(85-115)	20	1.2
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0208	mg/L	104	(50-150)		
MS_202011200148	Iron Total ICAP	ND	5	5.26	mg/L	105	(70-130)		
MS2_202011190483	Iron Total ICAP	ND	5	5.19	mg/L	104	(70-130)		
MSD_202011200148	Iron Total ICAP	ND	5	5.18	mg/L	104	(70-130)	20	1.6
MSD2_202011190483	Iron Total ICAP	ND	5	5.20	mg/L	104	(70-130)	20	0.16
LCS1	Magnesium Total ICAP		20	20.4	mg/L	102	(85-115)		
LCS2	Magnesium Total ICAP		20	20.1	mg/L	101	(85-115)	20	1.5
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0986	mg/L	99	(50-150)		
MS_202011200148	Magnesium Total ICAP	3.1	20	24.0	mg/L	104	(70-130)		
MS2_202011190483	Magnesium Total ICAP	ND	20	20.8	mg/L	104	(70-130)		
MSD_202011200148	Magnesium Total ICAP	3.1	20	23.7	mg/L	103	(70-130)	20	1.1
MSD2_202011190483	Magnesium Total ICAP	ND	20	20.8	mg/L	104	(70-130)	20	0.11
LCS1	Potassium Total ICAP		20	20.5	mg/L	103	(85-115)		
LCS2	Potassium Total ICAP		20	20.3	mg/L	102	(85-115)	20	0.98
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.686	mg/L	69	(50-150)		
MS_202011200148	Potassium Total ICAP	4.3	20	26.0	mg/L	109	(70-130)		
MS2_202011190483	Potassium Total ICAP	ND	20	21.0	mg/L	105	(70-130)		
MSD_202011200148	Potassium Total ICAP	4.3	20	25.8	mg/L	107	(70-130)	20	0.97
MSD2_202011190483	Potassium Total ICAP	ND	20	21.1	mg/L	106	(70-130)	20	0.31
LCS1	Sodium Total ICAP		50	50.8	mg/L	102	(85-115)		
LCS2	Sodium Total ICAP		50	50.2	mg/L	100	(85-115)	20	1.2
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.915	mg/L	92	(50-150)		
MS_202011200148	Sodium Total ICAP	15	50	66.2	mg/L	102	(70-130)		
MS2_202011190483	Sodium Total ICAP	ND	50	51.4	mg/L	102	(70-130)		
MSD_202011200148	Sodium Total ICAP	15	50	65.2	mg/L	100	(70-130)	20	1.6
MSD2_202011190483	Sodium Total ICAP	ND	50	51.5	mg/L	102	(70-130)	20	0.24

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 904644  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Alkalinity in CaCO3 units by SM 2320B</b>									
<b>Analytical Batch: 1290332</b>					<b>Analysis Date: 11/23/2020</b>				
LCS1	Alkalinity in CaCO3 units		100	97.9	mg/L	98	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.0	mg/L	98	(90-110)	20	0.20
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.13	mg/L	107	(50-150)		
MS_202011180172	Alkalinity in CaCO3 units	58	100	162	mg/L	104	(80-120)		
MS_202011190294	Alkalinity in CaCO3 units	93	100	191	mg/L	98	(80-120)		
MSD_202011180172	Alkalinity in CaCO3 units	58	100	162	mg/L	104	(80-120)	20	0.099
MSD_202011190294	Alkalinity in CaCO3 units	93	100	191	mg/L	98	(80-120)	20	0.031
<b>Total Suspended Solids (TSS) by SM 2540D</b>									
<b>Analytical Batch: 1290534</b>					<b>Analysis Date: 11/25/2020</b>				
DUP_202010140042	Total Suspended Solids (TSS)	220		216	mg/L		(0-10)	10	2.7
DUP_202010140072	Total Suspended Solids (TSS)	66		64.0	mg/L		(0-10)	10	3.1
LCS1	Total Suspended Solids (TSS)		175	162	mg/L	93	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	172	mg/L	98	(71-107)	20	6.0
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	5.00	mg/L	50	(50-150)		
<b>Hexavalent chromium(Dissolved) by EPA 218.6</b>									
<b>Analytical Batch: 1290657</b>					<b>Analysis Date: 11/24/2020</b>				
LCS1	Hexavalent chromium(Dissolved)		2	1.96	ug/L	98	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.96	ug/L	98	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0191	ug/L	96	(50-150)		
MS_202011200115	Hexavalent chromium(Dissolved)	1.1	2	3.16	ug/L	103	(90-110)		
MSD_202011200115	Hexavalent chromium(Dissolved)	1.1	2	3.15	ug/L	103	(90-110)	20	0.19
<b>Total Dissolved Solids (TDS) by E160.1/SM2540C</b>									
<b>Analytical Batch: 1290866</b>					<b>Analysis Date: 11/26/2020</b>				
DUP_202011190210	Total Dissolved Solid (TDS)	720		694	mg/L		(0-10)	10	4.0
DUP_202011200148	Total Dissolved Solid (TDS)	140		142	mg/L		(0-10)	10	1.4
LCS1	Total Dissolved Solid (TDS)		175	176	mg/L	101	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	678	mg/L	97	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	8.00	mg/L	80	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 904644  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>ICPMS Metals by EPA 200.8</b>									
<b>Analytical Batch: 1291470</b>					<b>Analysis Date: 12/04/2020</b>				
LCS1	Arsenic Total ICAP/MS		50	48.7	ug/L	97	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	48.1	ug/L	96	(85-115)	20	1.2
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.571	ug/L	57	(50-150)		
MS_202011250263	Arsenic Total ICAP/MS	ND	50	54.2	ug/L	108	(70-130)		
MS2_202011200357	Arsenic Total ICAP/MS	ND	50	54.1	ug/L	108	(70-130)		
MSD_202011250263	Arsenic Total ICAP/MS	ND	50	52.9	ug/L	105	(70-130)	20	2.4
MSD2_202011200357	Arsenic Total ICAP/MS	ND	50	44.1	ug/L	88	(70-130)	20	20
LCS1	Manganese Total ICAP/MS		100	99.1	ug/L	99	(85-115)		
LCS2	Manganese Total ICAP/MS		100	98.5	ug/L	99	(85-115)	20	0.61
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.07	ug/L	104	(50-150)		
MS_202011250263	Manganese Total ICAP/MS	ND	100	104	ug/L	104	(70-130)		
MS2_202011200357	Manganese Total ICAP/MS	5.7	100	111	ug/L	105	(70-130)		
MSD_202011250263	Manganese Total ICAP/MS	ND	100	103	ug/L	102	(70-130)	20	1.5
MSD2_202011200357	Manganese Total ICAP/MS	5.7	100	90.5	ug/L	85	(70-130)	20	20
LCS1	Uranium ICAP/MS		50	49.9	ug/L	100	(85-115)		
LCS2	Uranium ICAP/MS		50	50.2	ug/L	100	(85-115)	20	0.60
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.949	ug/L	95	(50-150)		
MS_202011250263	Uranium ICAP/MS	2.3	50	57.5	ug/L	111	(70-130)		
MS2_202011200357	Uranium ICAP/MS	12	50	73.1	ug/L	122	(70-130)		
MSD_202011250263	Uranium ICAP/MS	2.3	50	57.8	ug/L	111	(70-130)	20	0.47
MSD2_202011200357	Uranium ICAP/MS	12	50	57.0	ug/L	90	(70-130)	20	<u>25</u>

<b>ICPMS Metals by EPA 200.8</b>									
<b>Analytical Batch: 1292914</b>					<b>Analysis Date: 12/08/2020</b>				
LCS1	Arsenic Total ICAP/MS		50	49.2	ug/L	98	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	50.2	ug/L	100	(85-115)	20	2.0
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.828	ug/L	83	(50-150)		
MS_202012050005	Arsenic Total ICAP/MS	ND	50	51.4	ug/L	103	(70-130)		
MS2_202011250124	Arsenic Total ICAP/MS	11	50	58.8	ug/L	95	(70-130)		
MSD_202012050005	Arsenic Total ICAP/MS	ND	50	52.9	ug/L	106	(70-130)	20	3.0
MSD2_202011250124	Arsenic Total ICAP/MS	11	50	59.5	ug/L	97	(70-130)	20	1.1
LCS1	Manganese Total ICAP/MS		100	106	ug/L	106	(85-115)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 904644  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Manganese Total ICAP/MS		100	107	ug/L	107	(85-115)	20	0.94
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.12	ug/L	106	(50-150)		
MS_202012050005	Manganese Total ICAP/MS	ND	100	100	ug/L	100	(70-130)		
MS2_202011250124	Manganese Total ICAP/MS	ND	100	97.7	ug/L	96	(70-130)		
MSD_202012050005	Manganese Total ICAP/MS	ND	100	104	ug/L	104	(70-130)	20	3.6
MSD2_202011250124	Manganese Total ICAP/MS	ND	100	98.8	ug/L	97	(70-130)	20	1.1
LCS1	Uranium ICAP/MS		50	51.6	ug/L	103	(85-115)		
LCS2	Uranium ICAP/MS		50	52.7	ug/L	105	(85-115)	20	2.1
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.996	ug/L	100	(50-150)		
MS_202012050005	Uranium ICAP/MS	ND	50	51.7	ug/L	103	(70-130)		
MS2_202011250124	Uranium ICAP/MS	5.9	50	59.3	ug/L	107	(70-130)		
MSD_202012050005	Uranium ICAP/MS	ND	50	54.2	ug/L	108	(70-130)	20	4.7
MSD2_202011250124	Uranium ICAP/MS	5.9	50	61.5	ug/L	111	(70-130)	20	3.7

**Total Organic Carbon by SM 5310C**  
**Analytical Batch: 1293760**

**Analysis Date: 12/12/2020**

LCS1	Total Organic Carbon		5	5.37	mg/L	107	(90-110)		
LCS2	Total Organic Carbon		5	5.36	mg/L	107	(90-110)	20	0.19
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.254	mg/L	127	(50-150)		
MS_202011200482	Total Organic Carbon	0.84	4	4.78	mg/L	99	(80-120)		
MS2_202011230116	Total Organic Carbon	0.21	2	2.26	mg/L	102	(80-120)		
MSD_202011200482	Total Organic Carbon	0.84	4	5.06	mg/L	106	(80-120)	20	5.8
MSD2_202011230116	Total Organic Carbon	0.21	2	2.32	mg/L	106	(80-120)	20	3.3

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 01/14/2021

Quant Report - Page 1 of 1

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Pos Tubes (Tot, E., Coli), MPN/100ml (Tot, E., Coli), Pres/Abs (P/A)\* (Tot, E., Coli)

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required:
Comment:
Approved by:

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 01/14/2021

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_

Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large), MPN/100 mL (Total Coliform, E. Coli), Presence/Absence (P/A)\* (Total Coliform, E. Coli)

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 01/14/2021

Quant Report - Page 1 of 1

, Tel Fax

## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-44389-1  
Client Project/Site: 904644

For:  
Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:  
12/4/2020 4:00:18 PM

Lori Thompson, Project Manager I  
(714)895-5494  
[Lori.Thompson@eurofinset.com](mailto:Lori.Thompson@eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 904644

Job ID: 570-44389-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 904644

Job ID: 570-44389-1

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**Job ID: 570-44389-1**

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**Laboratory: Eurofins Calscience LLC**

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**Narrative**

**Job Narrative**  
**570-44389-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 11/20/2020 11:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.0° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-112025

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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# Detection Summary

Client: Eurofins Eaton Analytical  
Project/Site: 904644

Job ID: 570-44389-1

**Client Sample ID: 202011190339**

**Lab Sample ID: 570-44389-1**

No Detections.

**Client Sample ID: 202011190340**

**Lab Sample ID: 570-44389-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	0.773	J	0.966	0.773	mg/L	1		1664A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 904644

Job ID: 570-44389-1

## General Chemistry

Client Sample ID: 202011190339

Date Collected: 11/19/20 09:18

Date Received: 11/20/20 11:30

Lab Sample ID: 570-44389-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.977	0.781	mg/L		11/24/20 09:47	11/28/20 12:49	1

Client Sample ID: 202011190340

Date Collected: 11/19/20 11:48

Date Received: 11/20/20 11:30

Lab Sample ID: 570-44389-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	0.773	J	0.966	0.773	mg/L		11/24/20 09:47	11/28/20 12:49	1

# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 904644

Job ID: 570-44389-1

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 570-112025/1-A**  
**Matrix: Water**  
**Analysis Batch: 112667**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 112025**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		11/24/20 09:47	11/28/20 12:49	1

**Lab Sample ID: LCS 570-112025/2-A**  
**Matrix: Water**  
**Analysis Batch: 112667**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 112025**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	36.30		mg/L		91	78 - 114

**Lab Sample ID: LCSD 570-112025/3-A**  
**Matrix: Water**  
**Analysis Batch: 112667**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 112025**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	36.50		mg/L		91	78 - 114	1	18

# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 904644

Job ID: 570-44389-1

## General Chemistry

### Prep Batch: 112025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-44389-1	202011190339	Total/NA	Water	1664A	
570-44389-2	202011190340	Total/NA	Water	1664A	
MB 570-112025/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-112025/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-112025/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

### Analysis Batch: 112667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-44389-1	202011190339	Total/NA	Water	1664A	112025
570-44389-2	202011190340	Total/NA	Water	1664A	112025
MB 570-112025/1-A	Method Blank	Total/NA	Water	1664A	112025
LCS 570-112025/2-A	Lab Control Sample	Total/NA	Water	1664A	112025
LCSD 570-112025/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	112025

# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 904644

Job ID: 570-44389-1

**Client Sample ID: 202011190339**

**Lab Sample ID: 570-44389-1**

Date Collected: 11/19/20 09:18

Matrix: Water

Date Received: 11/20/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1024 mL	1000 mL	112025	11/24/20 09:47	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			112667	11/28/20 12:49	USUL	ECL 1

Instrument ID: NOEQUIP

**Client Sample ID: 202011190340**

**Lab Sample ID: 570-44389-2**

Date Collected: 11/19/20 11:48

Matrix: Water

Date Received: 11/20/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1035 mL	1000 mL	112025	11/24/20 09:47	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			112667	11/28/20 12:49	USUL	ECL 1

Instrument ID: NOEQUIP

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 904644

Job ID: 570-44389-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-30-21
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-30-21
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-21

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# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 904644

Job ID: 570-44389-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

**Protocol References:**

1664A = EPA-821-98-002

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 904644

Job ID: 570-44389-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-44389-1	202011190339	Water	11/19/20 09:18	11/20/20 11:30	
570-44389-2	202011190340	Water	11/19/20 11:48	11/20/20 11:30	

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44389 Date: 11/20/2020

**Submittal Form**

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder # 904644 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature

**eurofins** Eaton Analytical

**Ship To:**  
Eurofins CalScience  
7440 Lincoln Way  
Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

**Folder #:** 904644 **Report Due:** 12/07/2020

**Reports:** Jackie Contreras Sub-Contracting Administrator  
EMAIL TO: Eaton-MonroviaSubContract@eurofinsnet.com  
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
Phone (626) 386-1166 Fax (626) 386-1122  
Invoices to: Eurofins Eaton Analytical, LLC  
Accounts Payable 2426 New Holland Pike, Lancaster, PA, 17605

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix.  
Samples from: CALIFORNIA



<b>Sample ID</b> 202011190339	<b>Client Sample ID for reference onl</b> LH-INF	<b>Sample Date &amp; Time Matrix</b> 11/19/20 0918 DW	<b>PWS Systemcode</b> PWSID	<b>PWSID</b> JLS
<b>Sample type:</b>	<b>Sample Event:</b>	<b>Facility ID:</b>	<b>Sample Point ID:</b>	<b>Static ID:</b>
<b>Method</b> EPA 1664	<b>Prep Method</b> Oil and Grease by 1664(subbed)			
<b>Sample ID</b> 202011190340	<b>Client Sample ID for reference onl</b> MB-INF	<b>Sample Date &amp; Time Matrix</b> 11/19/20 1148 DW	<b>PWS Systemcode</b> PWSID	<b>PWSID</b> JLS
<b>Sample type:</b>	<b>Sample Event:</b>	<b>Facility ID:</b>	<b>Sample Point ID:</b>	<b>Static ID:</b>
<b>Method</b> EPA-1664	<b>Prep Method</b> Oil and Grease by 1664(subbed)			

**Relinquished by:** *Xms* **Sample Control** Date 11/20/20 Time 1130

**Received by:** \_\_\_\_\_ **Sample Control** Date 11/20/20 Time 1130

**Relinquished by:** \_\_\_\_\_ **Sample Control** Date \_\_\_\_\_ Time \_\_\_\_\_

**Received by:** \_\_\_\_\_ **Sample Control** Date \_\_\_\_\_ Time \_\_\_\_\_

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS  
An Acknowledgement of Receipt is requested to: attn: Jackie Contreras

*28/2.0 scb*

## Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-44389-1

**Login Number: 44389**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Ramos, Maribel**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)



## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 906889  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 906889  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **December 04, 2020 at 1322**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202012040189</u>	GAC-1-20201204 Static ID: 537.1 @537.1	12/04/2020 1015
<u>202012040190</u>	GAC-2-20201204 Static ID: 537.1 @537.1	12/04/2020 1018
<u>202012040191</u>	GAC-3-20201204 Static ID: 537.1 @537.1	12/04/2020 1021
<u>202012040192</u>	GAC-4-20201204 Static ID: 537.1 @537.1	12/04/2020 1024
<u>202012040193</u>	IX-1-20201204 Static ID: 537.1 @537.1	12/04/2020 1027
<u>202012040194</u>	IX-2-20201204 Static ID: 537.1 @537.1	12/04/2020 1030
<u>202012040195</u>	IX-3-20201204 Static ID: 537.1 @537.1	12/04/2020 1033
<u>202012040196</u>	IX-4-20201204 Static ID: 537.1 @537.1	12/04/2020 1036
<u>202012040197</u>	GAC-5-20201204 @537.1	12/04/2020 1230
<u>202012040198</u>	GAC-6-20201204 @537.1	12/04/2020 1233
<u>202012040201</u>	GAC-7-20201204 @537.1	12/04/2020 1236
<u>202012040202</u>	GAC-8-20201204	12/04/2020 1239



**Acknowledgement of Samples Received**

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 906889  
Project: 0250000  
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

The following samples were received from you on **December 04, 2020 at 1322**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202012040203	IX-5-20201204	12/04/2020 1242
	@537.1	
202012040204	IX-6-20201204	12/04/2020 1245
	@537.1	
202012040205	IX-7-20201204	12/04/2020 1248
	@537.1	
202012040206	IX-8-20201204	12/04/2020 1251
	@537.1	

**Test Description**

@537.1 -- EPA Method 537.1



Eaton Analytical

750 Royal Oaks Drive, Suite 100  
Monrovia, CA 91016-3629  
Phone: 626 386 1100  
Fax: 626 386 1101  
800 566 LABS (800 566 5227)  
Website: www.EatonAnalytical.com

# CHAIN OF CUSTODY RECORD

906889

EUROFINS EATON ANALYTICAL USE ONLY:

**LOGIN COMMENTS:** \_\_\_\_\_

**SAMPLES CHECKED AGAINST COC BY:** CB

**SAMPLES LOGGED IN BY:** CB

**SAMPLE TEMP RECEIVED AT:** \_\_\_\_\_

**SAMPLES REC'D DAY OF COLLECTION?**  (check for yes)

(Other) IR Gun ID = \_\_\_\_\_ (Observation = 7.8 °C) (Corr. Factor = \_\_\_\_\_ °C) (Final = \_\_\_\_\_ °C)

Monrovia IR Gun ID = 616 (Observation = 7.8 °C) (Corr. Factor = -0.2 °C) (Final = 7.6 °C)

Compliance Acceptance Criteria: (Chemistry: 4 ± 2 °C) (Microbiology: < 10°C)

**TYPE OF ICE:** Real  Synthetic \_\_\_\_\_ No Ice \_\_\_\_\_ **CONDITION OF ICE:** Frozen \_\_\_\_\_ Partially Frozen \_\_\_\_\_ Thawed \_\_\_\_\_

**METHOD OF SHIPMENT:** Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

TO BE COMPLETED BY SAMPLER:

**COMPANY/AGENCY NAME:** GSI Environmental Inc.  
19200 Von Karman Ave, Ste 300  
Irving, CA 91612

**EEA CLIENT CODE:** G001B: Lab Contact:  
Sophia Liang

**PROJECT CODE:** WRD Pilot  
Proj #: 5302  
Proj Contact: Miae Jean  
mjean@gsi-net.com

**SAMPLE GROUP:** Provide EDD

**COMPLIANCE SAMPLES**  **NON-COMPLIANCE SAMPLES**  (check for yes)

- Requires state forms \_\_\_\_\_

REGULATION INVOLVED: \_\_\_\_\_

Type of samples (circle one): ROUTINE SPECIAL CONFIRMATION (eg. SDWA, NPDES, etc.)

**SEE ATTACHED KIT ORDER FOR ANALYSES**  (check for yes), OR

List ALL ANALYSES REQUIRED (enter number of bottles sent for each test for each sample)

TAT requested: rush by adv notice only

STD  1 wk \_\_\_ 3 day \_\_\_ 2 day \_\_\_ 1 day \_\_\_

SAMPLE DATE	SAMPLE TIME	SAMPLE ID	CLIENT LAB ID	MATRIX	FIELD DATA	FIELD DATA	SAMPLER COMMENTS
12-4	1015	GAC-1-20201204		Water			
12-4	1918	GAC-2-20201204					
12-4	1921	GAC-3-20201204					
12-4	1924	GAC-4-20201204					
12-4	1927	IX-1-20201204					
12-4	1930	IX-2-20201204					
12-4	1933	IX-3-20201204					
12-4	1936	IX-4-20201204					

**\* MATRIX TYPES:** RSW = Raw Surface Water  
RGW = Raw Ground Water  
CFW = Chlor(am)inated Finished Water  
FW = Other Finished Water  
SEAW = Sea Water  
WW = Waste Water  
BW = Bottled Water  
SW = Storm Water  
SO = Soil  
SL = Sludge

**SAMPLED BY:** Robert Torres

**RELINQUISHED BY:** Robert Torres

**RECEIVED BY:** Chuck Brochu

**RELINQUISHED BY:** \_\_\_\_\_

**RECEIVED BY:** \_\_\_\_\_

**SIGNATURE** \_\_\_\_\_

**PRINT NAME** Robert Torres  
Robert Torres  
Chuck Brochu

**COMPANY/TITLE** GSI  
GSI  
CTA

**DATE** 12-4-2020  
12-4-2020  
12-4-20

**TIME** 1322  
1322  
1322



Eaton Analytical

# CHAIN OF CUSTODY RECORD

EUROFINS EATON ANALYTICAL USE ONLY.

750 Royal Oaks Drive, Suite 100  
 Monrovia, CA 91016-3629  
 Phone: 626 386 1100  
 Fax: 626 386 1101  
 800 566 LABS (800 566 5227)  
 Website: [www.EatonAnalytical.com](http://www.EatonAnalytical.com)

LOGIN COMMENTS:

SAMPLE TEMP RECEIVED AT:

(Other) IR Gun ID =

IR Gun ID = 616

(Observation = 7.8 °C)

(Observation = 7.8 °C)

SAMPLES CHECKED AGAINST COC BY: CB

SAMPLES LOGGED IN BY: CB

SAMPLES REC'D DAY OF COLLECTION? (check for yes)

(Final = 7.6 °C)

(Final = 7.6 °C)

Monrovia

Compliance Acceptance Criteria: (Chemistry: 4 ± 2 °C) (Microbiology: < 10°C)

TYPE OF ICE: Real  Synthetic

No Ice

CONDITION OF ICE: Frozen

Partially Frozen

Thawed

N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other:

TO BE COMPLETED BY SAMPLER:

COMPANY/AGENCY NAME:

GSI Environmental

PROJECT CODE:

WED Pilot

(check for yes)

COMPLIANCE SAMPLES

- Requires state forms

NON-COMPLIANCE SAMPLES

REGULATION INVOLVED:

Type of samples (circle one): ROUTINE SPECIAL CONFIRMATION (eg. SDWA, NPDES, etc.)

SAMPLE GROUP:

SEE ATTACHED KIT ORDER FOR ANALYSES (check for yes), OR

EEA CLIENT CODE:

STD 1 wk 3 day 2 day 1 day

List ALL ANALYSES REQUIRED (enter number of bottles sent for each test for each sample)

SAMPLE DATE	SAMPLE TIME	SAMPLE ID	CLIENT LAB ID	MATRIX	FIELD DATA	FIELD DATA	COMMENTS
12-4	1230	GAC-5-20201204		Water			
	1233	GAC-6-20201204					
	1236	GAC-7-20201204					
	1239	GAC-8-20201204					
	1242	IX-5-20201204					
	1245	IX-6-20201204					
	1248	IX-7-20201204					
	1251	IX-8-20201204					

\* MATRIX TYPES: RSW = Raw Surface Water, RGW = Raw Ground Water, CFW = Chlor(am)inated Finished Water, FW = Other Finished Water

SEAW = Sea Water, WW = Waste Water

BW = Bottled Water, SW = Storm Water

SO = Soil, SL = Sludge

SIGNATURE

SAMPLED BY: [Signature]

RELINQUISHED BY: [Signature]

RECEIVED BY: [Signature]

RELINQUISHED BY: [Signature]

RECEIVED BY: [Signature]

PRINT NAME

Robert Torres

Robert Torres

Chad Bracher

COMPANY/TITLE

GSI

GSI

GSI

DATE

12-4-20

12-4-2020

12-4-20

TIME

1322

1322

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 906889  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202012040193      <u>IX-1-20201204</u></b>						
12/07/2020 23:01	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
12/07/2020 23:01	Perfluorooctanoic acid (PFOA)		0.0031		ug/L	0.0020
<b>202012040194      <u>IX-2-20201204</u></b>						
12/07/2020 23:10	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
<b>202012040195      <u>IX-3-20201204</u></b>						
12/07/2020 23:20	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
12/07/2020 23:20	Perfluorohexanoic acid (PFHxA)		0.0039		ug/L	0.0020
12/07/2020 23:20	Perfluorooctanoic acid (PFOA)		0.0025		ug/L	0.0020
<b>202012040196      <u>IX-4-20201204</u></b>						
12/07/2020 23:29	Perfluorohexanoic acid (PFHxA)		0.0039		ug/L	0.0020
<b>202012040197      <u>GAC-5-20201204</u></b>						
12/07/2020 23:49	Perfluorobutanesulfonic acid (PFBS)		0.010		ug/L	0.0020
12/07/2020 23:49	Perfluoroheptanoic acid (PFHpA)		0.0036		ug/L	0.0020
12/07/2020 23:49	Perfluorohexanesulfonic acid (PFHxS)		0.0024		ug/L	0.0020
12/07/2020 23:49	Perfluorohexanoic acid (PFHxA)		0.0074		ug/L	0.0020
12/07/2020 23:49	Perfluorooctanesulfonic acid (PFOS)		0.0051		ug/L	0.0020
12/07/2020 23:49	Perfluorooctanoic acid (PFOA)		0.0084		ug/L	0.0020
<b>202012040198      <u>GAC-6-20201204</u></b>						
12/07/2020 23:58	Perfluorobutanesulfonic acid (PFBS)		0.017		ug/L	0.0020
12/07/2020 23:58	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
12/07/2020 23:58	Perfluorohexanoic acid (PFHxA)		0.010		ug/L	0.0020
<b>202012040201      <u>GAC-7-20201204</u></b>						
12/08/2020 00:08	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
12/08/2020 00:08	Perfluoroheptanoic acid (PFHpA)		0.0043		ug/L	0.0020
12/08/2020 00:08	Perfluorohexanesulfonic acid (PFHxS)		0.0034		ug/L	0.0020
12/08/2020 00:08	Perfluorohexanoic acid (PFHxA)		0.0081		ug/L	0.0020
12/08/2020 00:08	Perfluorooctanesulfonic acid (PFOS)		0.0033		ug/L	0.0020
12/08/2020 00:08	Perfluorooctanoic acid (PFOA)		0.0093		ug/L	0.0020
<b>202012040202      <u>GAC-8-20201204</u></b>						
12/08/2020 00:17	Perfluorobutanesulfonic acid (PFBS)		0.0066		ug/L	0.0020
12/08/2020 00:17	Perfluorohexanoic acid (PFHxA)		0.0056		ug/L	0.0020
12/08/2020 00:17	Perfluorooctanoic acid (PFOA)		0.0028		ug/L	0.0020
<b>202012040203      <u>IX-5-20201204</u></b>						

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
12/08/2020 03:48	Perfluorohexanoic acid (PFHxA)		0.0048		ug/L	0.0020
12/08/2020 03:48	Perfluorooctanoic acid (PFOA)		0.0022		ug/L	0.0020
		<b>202012040204</b>				
		<b><u>IX-6-20201204</u></b>				
12/08/2020 03:58	Perfluoroheptanoic acid (PFHpA)		0.0026		ug/L	0.0020
12/08/2020 03:58	Perfluorohexanoic acid (PFHxA)		0.0066		ug/L	0.0020
		<b>202012040205</b>				
		<b><u>IX-7-20201204</u></b>				
12/08/2020 02:22	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
12/08/2020 02:22	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
12/08/2020 02:22	Perfluorooctanoic acid (PFOA)		0.0042		ug/L	0.0020
		<b>202012040206</b>				
		<b><u>IX-8-20201204</u></b>				
12/08/2020 02:41	Perfluoroheptanoic acid (PFHpA)		0.0036		ug/L	0.0020
12/08/2020 02:41	Perfluorohexanoic acid (PFHxA)		0.0074		ug/L	0.0020
12/08/2020 02:41	Perfluorooctanoic acid (PFOA)		0.0020		ug/L	0.0020

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 1 800 566 LABS (1 800 566 5227)

Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20201204 (202012040189)</b>					<b>Sampled on 12/04/2020 1015</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	13C2-PFDA	104	%		1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	13C2-PFHxA	107	%		1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	99	%		1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	91	%		1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	106	%		1

<b>GAC-2-20201204 (202012040190)</b>					<b>Sampled on 12/04/2020 1018</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	13C2-PFDA	100	%		1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	13C2-PFHxA	105	%		1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	94	%		1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	95	%		1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**GAC-3-20201204 (202012040191)**

Sampled on 12/04/2020 1021

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.

(c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



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Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	13C2-PFDA	102	%		1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	13C2-PFHxA	103	%		1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	92	%		1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	95	%		1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**GAC-4-20201204 (202012040192)**

Sampled on 12/04/2020 1024

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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**Water Replenishment District**  
 Joseph Liles  
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 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	13C2-PFDA	100	%		1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	13C2-PFHxA	106	%		1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	95	%		1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	92	%		1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**IX-1-20201204 (202012040193)**

Static ID: 537.1

Sampled on 12/04/2020 1027

**EPA 537.1 - EPA Method 537.1**

12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0031	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUNA)	ND	ug/L	0.0020	1

Rounding on totals after summation.

(c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	13C2-PFDA	113	%		1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	13C2-PFHxA	107	%		1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	104	%		1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	91	%		1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**IX-2-20201204 (202012040194)**

**Sampled on 12/04/2020 1030**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	13C2-PFDA	111	%		1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	13C2-PFHxA	110	%		1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	104	%		1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	95	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	104	%		1
<b>IX-3-20201204 (202012040195)</b>					<b>Sampled on 12/04/2020 1033</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0025	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	13C2-PFDA	112	%		1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	13C2-PFHxA	107	%		1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	104	%		1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	92	%		1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	106	%		1

<b>IX-4-20201204 (202012040196)</b>					<b>Sampled on 12/04/2020 1036</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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 1 800 566 LABS (1 800 566 5227)

Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	13C2-PFDA	110	%		1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	13C2-PFHxA	106	%		1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	101	%		1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	93	%		1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	107	%		1

**GAC-5-20201204 (202012040197)**

Sampled on 12/04/2020 1230

**EPA 537.1 - EPA Method 537.1**

12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

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Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0036	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0024	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0074	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0051	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0084	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	13C2-PFDA	105	%		1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	13C2-PFHxA	104	%		1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	96	%		1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	97	%		1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**GAC-6-20201204 (202012040198)**

Sampled on 12/04/2020 1233

**EPA 537.1 - EPA Method 537.1**

12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.017	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.010	ug/L	0.0020	1

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Report: 906889  
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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	13C2-PFDA	107	%		1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	13C2-PFHxA	106	%		1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	101	%		1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	94	%		1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**GAC-7-20201204 (202012040201)**

Sampled on 12/04/2020 1236

**EPA 537.1 - EPA Method 537.1**

12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0043	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0034	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0081	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0033	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0093	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	13C2-PFDA	107	%		1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	13C2-PFHxA	107	%		1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	101	%		1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	92	%		1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	110	%		1

**GAC-8-20201204 (202012040202)**

**Sampled on 12/04/2020 1239**

**EPA 537.1 - EPA Method 537.1**

12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0066	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0056	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0028	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	13C2-PFDA	111	%		1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	13C2-PFHxA	112	%		1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	100	%		1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	93	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**IX-5-20201204 (202012040203)**

**Sampled on 12/04/2020 1242**

**EPA 537.1 - EPA Method 537.1**

12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0048	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0022	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	13C2-PFDA	108	%		1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	13C2-PFHxA	105	%		1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	13C3-HFPO-DA	101	%		1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	d3-NMeFOSAA	94	%		1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**IX-6-20201204 (202012040204)**

**Sampled on 12/04/2020 1245**

**EPA 537.1 - EPA Method 537.1**

12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0026	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0066	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	13C2-PFDA	107	%		1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	13C2-PFHxA	101	%		1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	13C3-HFPO-DA	100	%		1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	13C4-PFOS- IS#2	90	%		1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	d3-NMeFOSAA	96	%		1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	d5-NETFOSAA	107	%		1

**IX-7-20201204 (202012040205)**

Sampled on 12/04/2020 1248

**EPA 537.1 - EPA Method 537.1**

12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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**Water Replenishment District**  
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 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0042	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	13C2-PFDA	104	%		1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	13C2-PFHxA	100	%		1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	13C3-HFPO-DA	96	%		1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	d3-NMeFOSAA	95	%		1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**IX-8-20201204 (202012040206)**

Sampled on 12/04/2020 1251

**EPA 537.1 - EPA Method 537.1**

12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0036	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0074	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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**Report:** 906889  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0020	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	13C2-PFDA	117	%		1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	13C2-PFHxA	110	%		1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	13C3-HFPO-DA	108	%		1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	d3-NMeFOSAA	95	%		1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	d5-NEtFOSAA	103	%		1

Rounding on totals after summation.  
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Report: 906889  
Project: 0250000  
Group: WRD Pilot [Set #2]

Water Replenishment District

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**EPA Method 537.1**

**Prep Batch: 1292359 Analytical Batch: 1292720**

202012040189	GAC-1-20201204
202012040190	GAC-2-20201204
202012040191	GAC-3-20201204
202012040192	GAC-4-20201204
202012040193	IX-1-20201204
202012040194	IX-2-20201204
202012040195	IX-3-20201204
202012040196	IX-4-20201204
202012040197	GAC-5-20201204
202012040198	GAC-6-20201204
202012040201	GAC-7-20201204
202012040202	GAC-8-20201204

**Analysis Date: 12/07/2020**

Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ

**EPA Method 537.1**

**Prep Batch: 1292440 Analytical Batch: 1292727**

202012040203	IX-5-20201204
202012040204	IX-6-20201204
202012040205	IX-7-20201204
202012040206	IX-8-20201204

**Analysis Date: 12/08/2020**

Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ  
Analyzed by: SZZ

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Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>EPA Method 537.1 by EPA 537.1</b>									
<b>Prep Batch: 1292359 Analytical Batch: 1292720</b>					<b>Analysis Date: 12/07/2020</b>				
DUP_202012040192	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0490	ug/L	104	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0475	ug/L	101	(70-130)	30	3.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00195	ug/L	104	(50-150)		
MS2_202012040191	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0473	ug/L	100	(70-130)		
DUP_202012040192	13C2-PFDA (S)			94.4	%	94	(70-130)		
LCS3	13C2-PFDA (S)		100	109	%	109	(70-130)		
LCS4	13C2-PFDA (S)		100	109	%	109	(70-130)		
MBLK	13C2-PFDA (S)			104	%	104	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	104	%	104	(70-130)		
MS2_202012040191	13C2-PFDA (S)		100	102	%	102	(70-130)		
DUP_202012040192	13C2-PFHxA (S)			102	%	102	(70-130)		
LCS3	13C2-PFHxA (S)		100	109	%	109	(70-130)		
LCS4	13C2-PFHxA (S)		100	112	%	112	(70-130)		
MBLK	13C2-PFHxA (S)			110	%	110	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	115	%	115	(70-130)		
MS2_202012040191	13C2-PFHxA (S)		100	109	%	109	(70-130)		
DUP_202012040192	13C2-PFOA- IS#1 (I)			111	%	111	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	97.8	%	98	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	97.1	%	97	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	98.0	%	98	(50-150)		
MS2_202012040191	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
DUP_202012040192	13C3-HFPO-DA (S)			92.1	%	92	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MBLK	13C3-HFPO-DA (S)			100	%	100	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
MS2_202012040191	13C3-HFPO-DA (S)		100	98.7	%	99	(70-130)		
DUP_202012040192	13C4-PFOS- IS#2 (I)			94.6	%	95	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	92.5	%	93	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	93.9	%	94	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			95.4	%	95	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	93.4	%	93	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202012040191	13C4-PFOS- IS#2 (I)		100	91.7	%	92	(50-150)		
DUP_202012040192	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0514	ug/L	106	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0518	ug/L	107	(70-130)	30	0.78
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00214	ug/L	113	(50-150)		
MS2_202012040191	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0492	ug/L	101	(70-130)		
DUP_202012040192	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0501	ug/L	108	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0503	ug/L	108	(70-130)	30	0.40
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00207	ug/L	111	(50-150)		
MS2_202012040191	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0495	ug/L	106	(70-130)		
DUP_202012040192	d3-NMeFOSAA (I)			91.1	%	91	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	94.4	%	94	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	93.4	%	93	(50-150)		
MBLK	d3-NMeFOSAA (I)			94.3	%	94	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	95.0	%	95	(50-150)		
MS2_202012040191	d3-NMeFOSAA (I)		100	94.9	%	95	(50-150)		
DUP_202012040192	d5-NEtFOSAA (S)			107	%	107	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	103	%	103	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
MBLK	d5-NEtFOSAA (S)			103	%	103	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MS2_202012040191	d5-NEtFOSAA (S)		100	98.0	%	98	(70-130)		
DUP_202012040192	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0521	ug/L	104	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0517	ug/L	103	(70-130)	30	0.77
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00215	ug/L	108	(50-150)		
MS2_202012040191	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0488	ug/L	98	(70-130)		
DUP_202012040192	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0509	ug/L	102	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0518	ug/L	104	(70-130)	30	1.8
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS2_202012040191	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0508	ug/L	101	(70-130)		
DUP_202012040192	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0517	ug/L	103	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0533	ug/L	107	(70-130)	30	3.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00221	ug/L	111	(50-150)		
MS2_202012040191	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0507	ug/L	101	(70-130)		
DUP_202012040192	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0500	ug/L	113	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0492	ug/L	111	(70-130)	30	1.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00205	ug/L	116	(50-150)		
MS2_202012040191	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0503	ug/L	113	(70-130)		
DUP_202012040192	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0547	ug/L	109	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0545	ug/L	109	(70-130)	30	0.37
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00221	ug/L	110	(50-150)		
MS2_202012040191	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0508	ug/L	102	(70-130)		
DUP_202012040192	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0555	ug/L	111	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0561	ug/L	112	(70-130)	30	1.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00222	ug/L	111	(50-150)		
MS2_202012040191	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0517	ug/L	103	(70-130)		
DUP_202012040192	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0552	ug/L	110	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0560	ug/L	112	(70-130)	30	1.4
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00245	ug/L	123	(50-150)		
MS2_202012040191	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0527	ug/L	105	(70-130)		
DUP_202012040192	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0517	ug/L	113	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0504	ug/L	111	(70-130)	30	2.5
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00222	ug/L	122	(50-150)		
MS2_202012040191	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0517	ug/L	113	(70-130)		
DUP_202012040192	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0562	ug/L	112	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0554	ug/L	111	(70-130)	30	1.4

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 906889  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00249	ug/L	124	(50-150)		
MS2_202012040191	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0530	ug/L	106	(70-130)		
DUP_202012040192	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0568	ug/L	114	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0569	ug/L	114	(70-130)	30	0.18
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00240	ug/L	120	(50-150)		
MS2_202012040191	Perfluorononanoic acid (PFNA)	ND	0.05	0.0540	ug/L	108	(70-130)		
DUP_202012040192	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0516	ug/L	111	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0513	ug/L	111	(70-130)	30	0.58
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00218	ug/L	118	(50-150)		
MS2_202012040191	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0514	ug/L	111	(70-130)		
DUP_202012040192	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0548	ug/L	110	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0543	ug/L	109	(70-130)	30	0.92
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00243	ug/L	122	(50-150)		
MS2_202012040191	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0530	ug/L	106	(70-130)		
DUP_202012040192	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0550	ug/L	110	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0549	ug/L	110	(70-130)	30	0.18
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00240	ug/L	120	(50-150)		
MS2_202012040191	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0497	ug/L	99	(70-130)		
DUP_202012040192	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0503	ug/L	101	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0501	ug/L	100	(70-130)	30	0.40
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00195	ug/L	98	(50-150)		
MS2_202012040191	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0446	ug/L	89	(70-130)		
DUP_202012040192	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0524	ug/L	105	(70-130)	30	2.5
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00208	ug/L	104	(50-150)		

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 906889  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202012040191	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0489	ug/L	98	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1292440 Analytical Batch: 1292727

Analysis Date: 12/08/2020

DUP_202012040206	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0225	ug/L	96	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0251	ug/L	107	(70-130)	30	11
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00206	ug/L	110	(50-150)		
MS1_202012040205	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0250	ug/L	106	(70-130)		
DUP_202012040206	13C2-PFDA (S)			115	%	115	(70-130)		
LCS1	13C2-PFDA (S)		100	106	%	106	(70-130)		
LCS2	13C2-PFDA (S)		100	114	%	114	(70-130)		
MBLK	13C2-PFDA (S)			112	%	112	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	108	%	108	(70-130)		
MS1_202012040205	13C2-PFDA (S)		100	104	%	104	(70-130)		
DUP_202012040206	13C2-PFHxA (S)			108	%	108	(70-130)		
LCS1	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS2	13C2-PFHxA (S)		100	112	%	112	(70-130)		
MBLK	13C2-PFHxA (S)			111	%	111	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	115	%	115	(70-130)		
MS1_202012040205	13C2-PFHxA (S)		100	98.7	%	99	(70-130)		
DUP_202012040206	13C2-PFOA- IS#1 (I)			92.4	%	92	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	96.5	%	97	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	96.7	%	97	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			95.6	%	96	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	98.8	%	99	(50-150)		
MS1_202012040205	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
DUP_202012040206	13C3-HFPO-DA (S)			106	%	107	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	100	%	100	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
MBLK	13C3-HFPO-DA (S)			106	%	106	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MS1_202012040205	13C3-HFPO-DA (S)		100	95.6	%	96	(70-130)		
DUP_202012040206	13C4-PFOS- IS#2 (I)			92.4	%	92	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	92.4	%	92	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	91.1	%	91	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			93.2	%	93	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C4-PFOS- IS#2 (I)		100	91.6	%	92	(50-150)		
MS1_202012040205	13C4-PFOS- IS#2 (I)		100	91.0	%	91	(50-150)		
DUP_202012040206	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0247	ug/L	104	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0268	ug/L	113	(70-130)	30	8.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00222	ug/L	118	(50-150)		
MS1_202012040205	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0246	ug/L	104	(70-130)		
DUP_202012040206	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0234	ug/L	100	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0263	ug/L	113	(70-130)	30	12
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00209	ug/L	112	(50-150)		
MS1_202012040205	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0266	ug/L	114	(70-130)		
DUP_202012040206	d3-NMeFOSAA (I)			92.9	%	93	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	93.0	%	93	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	94.8	%	95	(50-150)		
MBLK	d3-NMeFOSAA (I)			92.6	%	93	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	94.9	%	95	(50-150)		
MS1_202012040205	d3-NMeFOSAA (I)		100	92.1	%	92	(50-150)		
DUP_202012040206	d5-NEtFOSAA (S)			103	%	103	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
MBLK	d5-NEtFOSAA (S)			106	%	106	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
MS1_202012040205	d5-NEtFOSAA (S)		100	108	%	109	(70-130)		
DUP_202012040206	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0243	ug/L	97	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0266	ug/L	106	(70-130)	30	9.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00221	ug/L	111	(50-150)		
MS1_202012040205	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0254	ug/L	101	(70-130)		
DUP_202012040206	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0250	ug/L	100	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0268	ug/L	107	(70-130)	30	7.3
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00226	ug/L	113	(50-150)		
MS1_202012040205	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0278	ug/L	111	(70-130)		

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 906889  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202012040206	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0248	ug/L	99	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0274	ug/L	110	(70-130)	30	10
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00229	ug/L	114	(50-150)		
MS1_202012040205	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0274	ug/L	109	(70-130)		
DUP_202012040206	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0236	ug/L	107	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0257	ug/L	116	(70-130)	30	8.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00200	ug/L	113	(50-150)		
MS1_202012040205	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0244	ug/L	109	(70-130)		
DUP_202012040206	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0259	ug/L	104	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0285	ug/L	114	(70-130)	30	9.6
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00222	ug/L	111	(50-150)		
MS1_202012040205	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0266	ug/L	106	(70-130)		
DUP_202012040206	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0290	ug/L	116	(70-130)	30	10
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00228	ug/L	114	(50-150)		
MS1_202012040205	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0272	ug/L	108	(70-130)		
DUP_202012040206	Perfluoroheptanoic acid (PFHpA)	0.0036		0.00344	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0265	ug/L	106	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0291	ug/L	116	(70-130)	30	9.3
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00239	ug/L	120	(50-150)		
MS1_202012040205	Perfluoroheptanoic acid (PFHpA)	0.0041	0.025	0.0298	ug/L	103	(70-130)		
DUP_202012040206	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0244	ug/L	107	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0266	ug/L	117	(70-130)	30	8.6
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00224	ug/L	123	(50-150)		
MS1_202012040205	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0266	ug/L	117	(70-130)		
DUP_202012040206	Perfluorohexanoic acid (PFHxA)	0.0074		0.00739	ug/L		(0-30)	30	0.23
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0268	ug/L	107	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0279	ug/L	112	(70-130)	30	4.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00237	ug/L	118	(50-150)		
MS1_202012040205	Perfluorohexanoic acid (PFHxA)	0.0068	0.025	0.0317	ug/L	99	(70-130)		
DUP_202012040206	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0289	ug/L	115	(70-130)	30	8.3
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00237	ug/L	119	(50-150)		
MS1_202012040205	Perfluorononanoic acid (PFNA)	ND	0.025	0.0275	ug/L	109	(70-130)		
DUP_202012040206	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0239	ug/L	103	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0270	ug/L	117	(70-130)	30	12
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00218	ug/L	118	(50-150)		
MS1_202012040205	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0268	ug/L	116	(70-130)		
DUP_202012040206	Perfluorooctanoic acid (PFOA)	0.0020		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0280	ug/L	112	(70-130)	30	5.5
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00235	ug/L	117	(50-150)		
MS1_202012040205	Perfluorooctanoic acid (PFOA)	0.0042	0.025	0.0317	ug/L	110	(70-130)		
DUP_202012040206	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0287	ug/L	115	(70-130)	30	6.1
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00248	ug/L	124	(50-150)		
MS1_202012040205	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0274	ug/L	108	(70-130)		
DUP_202012040206	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0230	ug/L	92	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0252	ug/L	101	(70-130)	30	9.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00203	ug/L	102	(50-150)		
MS1_202012040205	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0236	ug/L	94	(70-130)		
DUP_202012040206	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0244	ug/L	98	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0271	ug/L	109	(70-130)	30	11
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

**Report:** 906889  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00214	ug/L	107	(50-150)		
MS1_202012040205	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0252	ug/L	101	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 12/08/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 12/08/2020

, Tel Fax



**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 12/08/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn:

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:

Colilert Report - Page 1 of 1

**Report of Analysis by 24-Hour Colilert Test for  
Presence or Absence, Quantification of Total Coliform and E. Coli  
By Quantitray**

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 12/08/2020

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 909215  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

### STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 909215  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **December 17, 2020 at 1445**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202012170402</u>	IX-5-20201217 Static ID: 537.1 @537.1	12/17/2020 1133
<u>202012170403</u>	IX-6-20201217 Static ID: 537.1 @537.1	12/17/2020 1136
<u>202012170404</u>	IX-7-20201217 Static ID: 537.1 @537.1	12/17/2020 1139
<u>202012170405</u>	IX-8-20201217 Static ID: 537.1 @537.1	12/17/2020 1142
<u>202012170406</u>	GAC-5-20201217 @537.1	12/17/2020 1145
<u>202012170407</u>	GAC-6-20201217 @537.1	12/17/2020 1148
<u>202012170408</u>	GAC-7-20201217 @537.1	12/17/2020 1151
<u>202012170409</u>	GAC-8-20201217 @537.1	12/17/2020 1154
<u>202012170410</u>	IX-5M-20201217 @537.1	12/17/2020 1157
<u>202012170411</u>	IX-6M-20201217 @537.1	12/17/2020 1200
<u>202012170412</u>	IX-7M-20201217 @537.1	12/17/2020 1203
<u>202012170413</u>	IX-8M-20201217 @537.1	12/17/2020 1206
<u>202012170414</u>	GAC-5M-20201217	12/17/2020 1209

**Acknowledgement of Samples Received**

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 909215  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **December 17, 2020 at 1445**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202012170415	GAC-6M-20201217	12/17/2020 1212
	@537.1	
202012170416	GAC-7M-20201217	12/17/2020 1215
	@537.1	
202012170417	GAC-8M-20201217	12/17/2020 1218
	@537.1	
202012170418	MB-INF-20201217	12/17/2020 1221
	@ICP	Total Hardness as CaCO3 by ICP
	Uranium by ICPMS as pCi/L	@537.1
	@VOASDWA	Alkalinity in CaCO3 units
	Calcium Total ICAP	Chloride
	Iron Total ICAP	Magnesium Total ICAP
	Oil and Grease by 1664(subbed)	Perchlorate
	Sodium Total ICAP	Sulfate
	Total Organic Carbon	Total Suspended Solids (TSS)
	@ICPMS	
	@ANIONS48	
		Arsenic Total ICAP/MS
		Hexavalent chromium(Dissolved)
		Manganese Total ICAP/MS
		Potassium Total ICAP
		Total Dissolved Solid (TDS)

**Test Description**

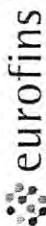
- @ICP -- ICP Metals
- @ICPMS -- ICPMS Metals
- @537.1 -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0
- @VOASDWA -- Volatile Organics by GCMS





909215

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) <u>PDT</u>	
TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com LABORATORY: Eurofins Eaton Analytical		<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.			
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> STANDARD		Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) Alkalinity (as CaCO3), (SM 2320B) Uranium, Arsenic, Manganese (EPA 200.8) Perchlorate (EPA 314.0) Hexavalent Chromium (EPA 218.6) Fe, Na, K, Ca, Mg (EPA 200.7) Total Hardness as CaCO3 (SM 2340B) VOCs (EPA 524.2) TOC (SM 5310C) TDS (E160.1/SM 2540C) TSS (SM 2540D) Oil & Grease (EPA 1664)			
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results		PFAS - full list (EPA 537.1)			
SAMPLE ID DATE TIME MATRIX NO. OF CONT.		Unpreserved Preserved Field Filtered			
IX-5-2020 <del>1217</del> 1217 IX-6-2020 <del>1217</del> 1217 IX-7-2020 <del>1217</del> 1217 IX-8-2020 <del>1217</del> 1217 GAC-5-2020 <del>1217</del> 1217 GAC-6-2020 <del>1217</del> 1217 GAC-7-2020 <del>1217</del> 1217 GAC-8-2020 <del>1217</del> 1217 IX-5M-2020 <del>1217</del> 1217 IX-6M-2020 <del>1217</del> 1217 IX-7M-2020 <del>1217</del> 1217 IX-8M-2020 <del>1217</del> 1217 MB-INF-2020 <del>1217</del> 1217		12/17/2020 1133 Water 2 12/17/2020 1136 Water 1 12/17/2020 1139 Water 1 12/17/2020 1142 Water 1 12/17/2020 1145 Water 1 12/17/2020 1148 Water 1 12/17/2020 1151 Water 1 12/17/2020 1154 Water 1 12/17/2020 1157 Water 1 12/17/2020 1200 Water 1 12/17/2020 1203 Water 1 12/17/2020 1206 Water 1 12/17/2020 1209 Water 1 12/17/2020 1212 Water 1 12/17/2020 1215 Water 1 12/17/2020 1218 Water 1 12/17/2020 1221 Water 1			
Relinquished by: (Signature) <u>[Signature]</u>		Received by: (Signature) <u>Clueck Bracker</u>		Date: <u>12-17-2020</u> Time: <u>1445</u>	
Relinquished by: (Signature)		Received by: (Signature)		Date: <u>12-17-20</u> Time: <u>1445</u>	
Relinquished by: (Signature)		Received by: (Signature)		Date: _____ Time: _____	



Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 908215

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 6016 (Observation = 17.1 °C) (Corr. Factor = -0.12 °C) (Final = 16.9 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Condition of ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

7) VOA and Radon Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: <u>Chuck Brooker</u>	PRINT NAME: <u>Chuck Brooker</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>12-17-20</u>	TIME: <u>1445</u>
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Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 909215  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

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**Folder Comments**

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove, CAELAP 2944 exp 9-30-2021

**Flags Legend:**

LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.

R7 - LFB/LFBD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202012170402      <u>IX-5-20201217</u></b>						
12/22/2020 23:08	Perfluorohexanoic acid (PFHxA)		0.0057		ug/L	0.0020
12/22/2020 23:08	Perfluorooctanoic acid (PFOA)		0.0028		ug/L	0.0020
<b>202012170403      <u>IX-6-20201217</u></b>						
12/22/2020 23:18	Perfluoroheptanoic acid (PFHpA)		0.0030		ug/L	0.0020
12/22/2020 23:18	Perfluorohexanoic acid (PFHxA)		0.0069		ug/L	0.0020
<b>202012170404      <u>IX-7-20201217</u></b>						
12/22/2020 23:27	Perfluoroheptanoic acid (PFHpA)		0.0042		ug/L	0.0020
12/22/2020 23:27	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
12/22/2020 23:27	Perfluorooctanoic acid (PFOA)		0.0050		ug/L	0.0020
<b>202012170405      <u>IX-8-20201217</u></b>						
12/22/2020 22:20	Perfluoroheptanoic acid (PFHpA)		0.0039		ug/L	0.0020
12/22/2020 22:20	Perfluorohexanoic acid (PFHxA)		0.0076		ug/L	0.0020
12/22/2020 22:20	Perfluorooctanoic acid (PFOA)		0.0024		ug/L	0.0020
<b>202012170406      <u>GAC-5-20201217</u></b>						
12/22/2020 22:39	Perfluorobutanesulfonic acid (PFBS)		0.0098		ug/L	0.0020
12/22/2020 22:39	Perfluoroheptanoic acid (PFHpA)		0.0039		ug/L	0.0020
12/22/2020 22:39	Perfluorohexanesulfonic acid (PFHxS)		0.0028		ug/L	0.0020
12/22/2020 22:39	Perfluorohexanoic acid (PFHxA)		0.0079		ug/L	0.0020
12/22/2020 22:39	Perfluorooctanesulfonic acid (PFOS)		0.0072		ug/L	0.0020
12/22/2020 22:39	Perfluorooctanoic acid (PFOA)		0.0099		ug/L	0.0020
<b>202012170407      <u>GAC-6-20201217</u></b>						
12/23/2020 03:27	Perfluorobutanesulfonic acid (PFBS)		0.016		ug/L	0.0020
12/23/2020 03:27	Perfluoroheptanoic acid (PFHpA)		0.0048		ug/L	0.0020
12/23/2020 03:27	Perfluorohexanoic acid (PFHxA)		0.0099		ug/L	0.0020
12/23/2020 03:27	Perfluorooctanoic acid (PFOA)		0.0024		ug/L	0.0020
<b>202012170408      <u>GAC-7-20201217</u></b>						
12/23/2020 03:36	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
12/23/2020 03:36	Perfluoroheptanoic acid (PFHpA)		0.0042		ug/L	0.0020
12/23/2020 03:36	Perfluorohexanesulfonic acid (PFHxS)		0.0040		ug/L	0.0020
12/23/2020 03:36	Perfluorohexanoic acid (PFHxA)		0.0089		ug/L	0.0020
12/23/2020 03:36	Perfluorooctanesulfonic acid (PFOS)		0.0050		ug/L	0.0020
12/23/2020 03:36	Perfluorooctanoic acid (PFOA)		0.010		ug/L	0.0020
<b>202012170409      <u>GAC-8-20201217</u></b>						

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
12/22/2020 23:37	Perfluorobutanesulfonic acid (PFBS)		0.0072		ug/L	0.0020
12/22/2020 23:37	Perfluoroheptanoic acid (PFHpA)		0.0023		ug/L	0.0020
12/22/2020 23:37	Perfluorohexanoic acid (PFHxA)		0.0062		ug/L	0.0020
12/22/2020 23:37	Perfluorooctanoic acid (PFOA)		0.0038		ug/L	0.0020
		<b>202012170410 IX-5M-20201217</b>				
12/22/2020 23:46	Perfluorobutanesulfonic acid (PFBS)		0.0024		ug/L	0.0020
12/22/2020 23:46	Perfluoroheptanoic acid (PFHpA)		0.0038		ug/L	0.0020
12/22/2020 23:46	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020
12/22/2020 23:46	Perfluorooctanesulfonic acid (PFOS)		0.0038		ug/L	0.0020
12/22/2020 23:46	Perfluorooctanoic acid (PFOA)		0.010		ug/L	0.0020
		<b>202012170411 IX-6M-20201217</b>				
12/22/2020 23:56	Perfluorobutanesulfonic acid (PFBS)		0.0022		ug/L	0.0020
12/22/2020 23:56	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
12/22/2020 23:56	Perfluorohexanoic acid (PFHxA)		0.0051		ug/L	0.0020
12/22/2020 23:56	Perfluorooctanoic acid (PFOA)		0.0083		ug/L	0.0020
		<b>202012170412 IX-7M-20201217</b>				
12/23/2020 00:05	Perfluorobutanesulfonic acid (PFBS)		0.0054		ug/L	0.0020
12/23/2020 00:05	Perfluoroheptanoic acid (PFHpA)		0.0046		ug/L	0.0020
12/23/2020 00:05	Perfluorohexanoic acid (PFHxA)		0.0076		ug/L	0.0020
12/23/2020 00:05	Perfluorononanoic acid (PFNA)		0.0020		ug/L	0.0020
12/23/2020 00:05	Perfluorooctanesulfonic acid (PFOS)		0.0025		ug/L	0.0020
12/23/2020 00:05	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
		<b>202012170413 IX-8M-20201217</b>				
12/23/2020 00:25	Perfluorobutanesulfonic acid (PFBS)		0.0040		ug/L	0.0020
12/23/2020 00:25	Perfluoroheptanoic acid (PFHpA)		0.0046		ug/L	0.0020
12/23/2020 00:25	Perfluorohexanoic acid (PFHxA)		0.0073		ug/L	0.0020
12/23/2020 00:25	Perfluorononanoic acid (PFNA)		0.0020		ug/L	0.0020
12/23/2020 00:25	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
		<b>202012170414 GAC-5M-20201217</b>				
12/23/2020 00:34	Perfluorobutanesulfonic acid (PFBS)		0.010		ug/L	0.0020
12/23/2020 00:34	Perfluoroheptanoic acid (PFHpA)		0.0050		ug/L	0.0020
12/23/2020 00:34	Perfluorohexanesulfonic acid (PFHxS)		0.0053		ug/L	0.0020
12/23/2020 00:34	Perfluorohexanoic acid (PFHxA)		0.0086		ug/L	0.0020
12/23/2020 00:34	Perfluorononanoic acid (PFNA)		0.0028		ug/L	0.0020
12/23/2020 00:34	Perfluorooctanesulfonic acid (PFOS)		0.021		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
12/23/2020 00:34	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
	<b>202012170415</b>	<b><u>GAC-6M-20201217</u></b>				
12/23/2020 00:44	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
12/23/2020 00:44	Perfluoroheptanoic acid (PFHpA)		0.0049		ug/L	0.0020
12/23/2020 00:44	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
12/23/2020 00:44	Perfluorohexanoic acid (PFHxA)		0.0077		ug/L	0.0020
12/23/2020 00:44	Perfluorononanoic acid (PFNA)		0.0023		ug/L	0.0020
12/23/2020 00:44	Perfluorooctanesulfonic acid (PFOS)		0.014		ug/L	0.0020
12/23/2020 00:44	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
	<b>202012170416</b>	<b><u>GAC-7M-20201217</u></b>				
12/23/2020 00:53	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
12/23/2020 00:53	Perfluoroheptanoic acid (PFHpA)		0.0050		ug/L	0.0020
12/23/2020 00:53	Perfluorohexanesulfonic acid (PFHxS)		0.0065		ug/L	0.0020
12/23/2020 00:53	Perfluorohexanoic acid (PFHxA)		0.0084		ug/L	0.0020
12/23/2020 00:53	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
12/23/2020 00:53	Perfluorooctanesulfonic acid (PFOS)		0.024		ug/L	0.0020
12/23/2020 00:53	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
	<b>202012170417</b>	<b><u>GAC-8M-20201217</u></b>				
12/23/2020 01:03	Perfluorobutanesulfonic acid (PFBS)		0.0091		ug/L	0.0020
12/23/2020 01:03	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
12/23/2020 01:03	Perfluorohexanesulfonic acid (PFHxS)		0.0043		ug/L	0.0020
12/23/2020 01:03	Perfluorohexanoic acid (PFHxA)		0.0076		ug/L	0.0020
12/23/2020 01:03	Perfluorononanoic acid (PFNA)		0.0022		ug/L	0.0020
12/23/2020 01:03	Perfluorooctanesulfonic acid (PFOS)		0.018		ug/L	0.0020
12/23/2020 01:03	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
	<b>202012170418</b>	<b><u>MB-INF-20201217</u></b>				
12/30/2020 17:45	Alkalinity in CaCO3 units		160		mg/L	2.0
12/22/2020 20:45	Arsenic Total ICAP/MS		1.2	10	ug/L	1.0
12/22/2020 11:16	Calcium Total ICAP		62		mg/L	1.0
12/17/2020 21:18	Chloride		49	250	mg/L	2.5
12/22/2020 13:07	Hexavalent chromium(Dissolved)		0.48		ug/L	0.020
12/22/2020 11:16	Magnesium Total ICAP		12		mg/L	0.10
12/17/2020 21:18	Nitrate as Nitrogen by IC		2.7	10	mg/L	0.50
12/17/2020 21:18	Nitrate as NO3 (calc)		12	45	mg/L	2.2
12/28/2020 10:49	Oil and Grease by 1664(subbed)		0.956		mg/L	0.96
12/23/2020 09:41	Perfluorobutanesulfonic acid (PFBS)		0.0095		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
12/23/2020 09:41	Perfluorodecanoic acid (PFDA)		0.0020		ug/L	0.0020
12/23/2020 09:41	Perfluoroheptanoic acid (PFHpA)		0.0049		ug/L	0.0020
12/23/2020 09:41	Perfluorohexanesulfonic acid (PFHxS)		0.0070		ug/L	0.0020
12/23/2020 09:41	Perfluorohexanoic acid (PFHxA)		0.0073		ug/L	0.0020
12/23/2020 09:41	Perfluorononanoic acid (PFNA)		0.0042		ug/L	0.0020
12/23/2020 09:41	Perfluorooctanesulfonic acid (PFOS)		0.039		ug/L	0.0020
12/23/2020 09:41	Perfluorooctanoic acid (PFOA)		0.017		ug/L	0.0020
12/22/2020 11:16	Potassium Total ICAP		3.8		mg/L	1.0
12/22/2020 11:16	Sodium Total ICAP		51		mg/L	1.0
12/17/2020 21:18	Sulfate		72	250	mg/L	2.5
12/22/2020 22:37	Total Dissolved Solids (TDS)		400	500	mg/L	10
12/22/2020 13:21	Total Hardness as CaCO3 by ICP (calc)		200		mg/L	3.0
12/17/2020 21:18	Total Nitrate, Nitrite-N, CALC		2.7		mg/L	0.10
01/12/2021 05:02	Total Organic Carbon		0.72		mg/L	0.20
12/21/2020 15:14	Uranium by ICPMS as pCi/L		1.3		pCi/L	0.70
12/22/2020 20:45	Uranium ICAP/MS		2.0	30	ug/L	1.0

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Report: 909215  
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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>IX-5-20201217 (202012170402)</b>					<b>Sampled on 12/17/2020 1133</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0057	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0028	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	13C2-PFDA	110	%		1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	13C2-PFHxA	103	%		1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	103	%		1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	93	%		1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	101	%		1

<b>IX-6-20201217 (202012170403)</b>					<b>Sampled on 12/17/2020 1136</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0030	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0069	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	13C2-PFDA	103	%		1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	13C2-PFHxA	97	%		1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	97	%		1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	93	%		1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**IX-7-20201217 (202012170404)**

Static ID: 537.1

**Sampled on 12/17/2020 1139**

**EPA 537.1 - EPA Method 537.1**

12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0042	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0050	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	13C2-PFDA	96	%		1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	13C2-PFHxA	96	%		1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	94	%		1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	90	%		1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	98	%		1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**IX-8-20201217 (202012170405)**

Sampled on 12/17/2020 1142

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0039	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0076	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0024	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	13C2-PFDA	105	%		1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	13C2-PFHxA	104	%		1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	101	%		1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	94	%		1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**GAC-5-20201217 (202012170406)**

Sampled on 12/17/2020 1145

**EPA 537.1 - EPA Method 537.1**

12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0098	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0039	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0028	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0079	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0072	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0099	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	13C2-PFDA	102	%		1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	13C2-PFHxA	105	%		1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	99	%		1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	92	%		1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**GAC-6-20201217 (202012170407)**

**Sampled on 12/17/2020 1148**

**EPA 537.1 - EPA Method 537.1**

12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.016	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0048	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0099	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0024	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	13C2-PFDA	112	%		1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	13C2-PFHxA	113	%		1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	13C3-HFPO-DA	107	%		1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	d3-NMeFOSAA	108	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	d5-NEtFOSAA	107	%		1
<b>GAC-7-20201217 (202012170408)</b>					<b>Sampled on 12/17/2020 1151</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0042	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0040	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0089	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0050	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.010	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	13C2-PFDA	110	%		1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	13C2-PFHxA	115	%		1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	13C3-HFPO-DA	109	%		1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	d3-NMeFOSAA	105	%		1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	d5-NEtFOSAA	112	%		1

**GAC-8-20201217 (202012170409)**

**Sampled on 12/17/2020 1154**

**EPA 537.1 - EPA Method 537.1**

12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0072	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0023	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0062	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0038	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	13C2-PFDA	109	%		1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	13C2-PFHxA	111	%		1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	108	%		1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	97	%		1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**IX-5M-20201217 (202012170410)**

Sampled on 12/17/2020 1157

**EPA 537.1 - EPA Method 537.1**

12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0024	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0038	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0038	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.010	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	13C2-PFDA	110	%		1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	13C2-PFHxA	112	%		1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	90	%		1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	109	%		1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	99	%		1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**IX-6M-20201217 (202012170411)**

**Sampled on 12/17/2020 1200**

**EPA 537.1 - EPA Method 537.1**

12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0022	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0051	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0083	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	13C2-PFDA	114	%		1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	13C2-PFHxA	114	%		1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	88	%		1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	110	%		1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	92	%		1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**IX-7M-20201217 (202012170412)**

Sampled on 12/17/2020 1203

**EPA 537.1 - EPA Method 537.1**

12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0054	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0046	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0076	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0020	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0025	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	13C2-PFDA	110	%		1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	13C2-PFHxA	108	%		1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	89	%		1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	108	%		1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	90	%		1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	95	%		1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**IX-8M-20201217 (202012170413)**

**Sampled on 12/17/2020 1206**

**EPA 537.1 - EPA Method 537.1**

12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0040	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0046	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0073	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0020	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	13C2-PFDA	108	%		1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	13C2-PFHxA	107	%		1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	107	%		1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	97	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	97	%		1
<b>GAC-5M-20201217 (202012170414)</b>					<b>Sampled on 12/17/2020 1209</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0050	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0053	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0086	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0028	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.021	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	13C2-PFDA	115	%		1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	13C2-PFHxA	113	%		1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	89	%		1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	112	%		1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	95	%		1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**GAC-6M-20201217 (202012170415)**

**Sampled on 12/17/2020 1212**

**EPA 537.1 - EPA Method 537.1**

12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0049	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0077	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0023	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.014	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	13C2-PFDA	112	%		1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	13C2-PFHxA	113	%		1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	111	%		1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	99	%		1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	d5-NETFOSAA	101	%		1

**GAC-7M-20201217 (202012170416)**

Sampled on 12/17/2020 1215

**EPA 537.1 - EPA Method 537.1**

12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0050	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0065	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0084	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.024	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	13C2-PFDA	108	%		1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	13C2-PFHxA	114	%		1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	90	%		1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	110	%		1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	89	%		1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	98	%		1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	99	%		1

**GAC-8M-20201217 (202012170417)**

Sampled on 12/17/2020 1218

**EPA 537.1 - EPA Method 537.1**

12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0091	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0043	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0076	ug/L	0.0020	1

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 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0022	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.018	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	13C2-PFDA	117	%		1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	13C2-PFHxA	118	%		1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	88	%		1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	118	%		1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	97	%		1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	d5-NEFOSAA	102	%		1

**MB-INF-20201217 (202012170418)**

Sampled on 12/17/2020 1221

**EPA 200.8 - ICPMS Metals**

12/18/20	12/22/20 20:45	1295017	1295209	(EPA 200.8)	Arsenic Total ICAP/MS	1.2	ug/L	1.0	1
12/18/20	12/22/20 20:45	1295017	1295209	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
12/18/20	12/22/20 20:45	1295017	1295209	(EPA 200.8)	Uranium ICAP/MS	2.0	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

12/18/20	12/22/20 11:16	1295017	1295535	(EPA 200.7)	Calcium Total ICAP	62	mg/L	1.0	1
12/18/20	12/22/20 11:16	1295017	1295535	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
12/18/20	12/22/20 11:16	1295017	1295535	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	0.10	1
12/18/20	12/22/20 11:16	1295017	1295535	(EPA 200.7)	Potassium Total ICAP	3.8	mg/L	1.0	1
12/18/20	12/22/20 11:16	1295017	1295535	(EPA 200.7)	Sodium Total ICAP	51	mg/L	1.0	1

**SM 5310C - Total Organic Carbon**

01/12/21	05:02		1299085	(SM 5310C)	Total Organic Carbon	0.72	mg/L	0.20	1
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**EPA 200.8 - Uranium by ICPMS as pCi/L**

12/21/20	15:14			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.3 (c)	pCi/L	0.70	1
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**SM 2340B - Total Hardness as CaCO3 by ICP**

12/22/20	13:21			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	200 (c)	mg/L	3.0	1
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**EPA 218.6 - Hexavalent chromium(Dissolved)**

12/22/20	13:07		1295808	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.48	ug/L	0.020	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

12/17/20	21:18		1294982	(EPA 300.0)	Nitrate as Nitrogen by IC	2.7	mg/L	0.50	5
12/17/20	21:18		1294982	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
12/17/20	21:18		1294982	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	12/17/20 21:18		1294982	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.7	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	12/17/20 21:18		1294977	(EPA 300.0)	Chloride	49	mg/L	2.5	5
	12/17/20 21:18		1294977	(EPA 300.0)	Sulfate	72	mg/L	2.5	5
<b>EPA 314.0 - Perchlorate</b>									
	12/31/20 20:34	(1)	1297375	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0095	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0020	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0049	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0070	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0073	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0042	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.039	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.017	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	13C2-PFDA	100	%		1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	13C2-PFHxA	104	%		1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	13C3-HFPO-DA	104	%		1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	d3-NMeFOSAA	104	%		1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	d5-NEtFOSAA	103	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	12/28/20 10:49			(EPA 1664)	Oil and Grease by 1664(subbed)	0.956	mg/L	0.96	1

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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (LM)	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1

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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Hexachlorobutadiene	ND (LM)	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	tert-Butyl Ethyl Ether	ND (R7)	ug/L	3.0	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,2-Dichloroethane-d4	104	%		1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	4-Bromofluorobenzene	99	%		1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Toluene-d8	96	%		1

**SM 2320B - Alkalinity in CaCO3 units**

Rounding on totals after summation.  
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Report: 909215  
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**Water Replenishment District**

Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	12/30/20 17:45		1296968	(SM 2320B)	Alkalinity in CaCO3 units	160	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
12/22/20	12/22/20 22:37	1295775	1295777	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	400	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	12/22/20 20:49		1295505	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1

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**Report:** 909215  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

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**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1294977**

202012170418 MB-INF-20201217

**Analysis Date: 12/17/2020**

Analyzed by: A9QW

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1294982**

202012170418 MB-INF-20201217

**Analysis Date: 12/17/2020**

Analyzed by: A9QW

**ICPMS Metals**

**Prep Batch: 1295017 Analytical Batch: 1295209**

202012170418 MB-INF-20201217

**Analysis Date: 12/22/2020**

Analyzed by: AZS

**Total Suspended Solids (TSS)**

**Analytical Batch: 1295505**

202012170418 MB-INF-20201217

**Analysis Date: 12/22/2020**

Analyzed by: TJ52

**ICP Metals**

**Prep Batch: 1295017 Analytical Batch: 1295535**

202012170418 MB-INF-20201217

**Analysis Date: 12/22/2020**

Analyzed by: NINA

**Volatile Organics by GCMS**

**Prep Batch: 1295541 Analytical Batch: 1295542**

202012170418 MB-INF-20201217

**Analysis Date: 12/21/2020**

Analyzed by: TR7W

**Total Dissolved Solids (TDS)**

**Prep Batch: 1295775 Analytical Batch: 1295777**

202012170418 MB-INF-20201217

**Analysis Date: 12/22/2020**

Analyzed by: TJ52

**Hexavalent chromium(Dissolved)**

**Analytical Batch: 1295808**

202012170418 MB-INF-20201217

**Analysis Date: 12/22/2020**

Analyzed by: TLH

**EPA Method 537.1**

**Prep Batch: 1295045 Analytical Batch: 1295814**

202012170402 IX-5-20201217  
 202012170403 IX-6-20201217  
 202012170404 IX-7-20201217  
 202012170405 IX-8-20201217  
 202012170406 GAC-5-20201217  
 202012170409 GAC-8-20201217  
 202012170410 IX-5M-20201217  
 202012170411 IX-6M-20201217  
 202012170412 IX-7M-20201217  
 202012170413 IX-8M-20201217  
 202012170414 GAC-5M-20201217  
 202012170415 GAC-6M-20201217  
 202012170416 GAC-7M-20201217  
 202012170417 GAC-8M-20201217

**Analysis Date: 12/22/2020**

Analyzed by: SZZ

Analyzed by: SZZ

Analyzed by: SZZ

Analyzed by: SZZ

Analyzed by: SZZ

Analyzed by: SZZ

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**Report:** 909215  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

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**EPA Method 537.1**

**Prep Batch: 1295306 Analytical Batch: 1295815**

202012170407 GAC-6-20201217  
202012170408 GAC-7-20201217

**Analysis Date: 12/23/2020**

Analyzed by: SZZ  
Analyzed by: SZZ

**EPA Method 537.1**

**Prep Batch: 1295349 Analytical Batch: 1295820**

202012170418 MB-INF-20201217

**Analysis Date: 12/23/2020**

Analyzed by: SZZ

**Alkalinity in CaCO3 units**

**Analytical Batch: 1296968**

202012170418 MB-INF-20201217

**Analysis Date: 12/30/2020**

Analyzed by: ZS6I

**Perchlorate**

**Analytical Batch: 1297375**

202012170418 MB-INF-20201217

**Analysis Date: 12/31/2020**

Analyzed by: H5VG

**Total Organic Carbon**

**Analytical Batch: 1299085**

202012170418 MB-INF-20201217

**Analysis Date: 01/12/2021**

Analyzed by: ZS6I

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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1294977</b>					<b>Analysis Date: 12/17/2020</b>				
LCS1	Chloride		25	26.9	mg/L	108	(90-110)		
LCS2	Chloride		25	26.9	mg/L	108	(90-110)	20	0.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.473	mg/L	95	(50-150)		
MS_202012170293	Chloride	67	26	93.2	mg/L	105	(80-120)		
MSD_202012170293	Chloride	67	26	93.3	mg/L	105	(80-120)	20	0.10
LCS1	Sulfate		50	52.3	mg/L	105	(90-110)		
LCS2	Sulfate		50	52.3	mg/L	105	(90-110)	20	0.0
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.926	mg/L	93	(50-150)		
MRLLW	Sulfate		0.25	0.223	mg/L	89	(50-150)		
MS_202012170293	Sulfate	4.5	50	59.5	mg/L	110	(80-120)		
MSD_202012170293	Sulfate	4.5	50	60.1	mg/L	111	(80-120)	20	1.0
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1294982</b>					<b>Analysis Date: 12/17/2020</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.56	mg/L	103	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.56	mg/L	103	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0474	mg/L	95	(50-150)		
MS_202012170293	Nitrate as Nitrogen by IC	0.44	2.6	3.10	mg/L	106	(80-120)		
MSD_202012170293	Nitrate as Nitrogen by IC	0.44	2.6	3.13	mg/L	107	(80-120)	20	1.0
LCS1	Nitrite Nitrogen by IC		1	0.955	mg/L	96	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.955	mg/L	96	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0476	mg/L	95	(50-150)		
MS_202012170293	Nitrite Nitrogen by IC	ND	1	0.839	mg/L	84	(80-120)		
MSD_202012170293	Nitrite Nitrogen by IC	ND	1	0.849	mg/L	85	(80-120)	20	1.2
<b>ICPMS Metals by EPA 200.8</b>									
<b>Analytical Batch: 1295209</b>					<b>Analysis Date: 12/22/2020</b>				
LCS1	Arsenic Total ICAP/MS		50	49.9	ug/L	100	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	48.8	ug/L	98	(85-115)	20	2.2
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.916	ug/L	92	(50-150)		
MS_202012170226	Arsenic Total ICAP/MS	3.8	50	58.2	ug/L	109	(70-130)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202012170198	Arsenic Total ICAP/MS	1.2	50	54.8	ug/L	107	(70-130)		
MSD_202012170226	Arsenic Total ICAP/MS	3.8	50	60.0	ug/L	112	(70-130)	20	3.0
MSD2_202012170198	Arsenic Total ICAP/MS	1.2	50	56.9	ug/L	111	(70-130)	20	3.8
LCS1	Manganese Total ICAP/MS		100	103	ug/L	103	(85-115)		
LCS2	Manganese Total ICAP/MS		100	101	ug/L	101	(85-115)	20	2.0
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.00	ug/L	100	(50-150)		
MS_202012170226	Manganese Total ICAP/MS	2.8	100	111	ug/L	108	(70-130)		
MS2_202012170198	Manganese Total ICAP/MS	2.9	100	109	ug/L	106	(70-130)		
MSD_202012170226	Manganese Total ICAP/MS	2.8	100	114	ug/L	111	(70-130)	20	2.7
MSD2_202012170198	Manganese Total ICAP/MS	2.9	100	114	ug/L	111	(70-130)	20	4.2
LCS1	Uranium ICAP/MS		50	52.2	ug/L	104	(85-115)		
LCS2	Uranium ICAP/MS		50	53.4	ug/L	107	(85-115)	20	2.3
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.955	ug/L	96	(50-150)		
MS_202012170226	Uranium ICAP/MS	5.4	50	65.6	ug/L	120	(70-130)		
MS2_202012170198	Uranium ICAP/MS	1.5	50	59.3	ug/L	115	(70-130)		
MSD_202012170226	Uranium ICAP/MS	5.4	50	67.0	ug/L	123	(70-130)	20	2.1
MSD2_202012170198	Uranium ICAP/MS	1.5	50	62.6	ug/L	122	(70-130)	20	5.5

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1295505

Analysis Date: 12/22/2020

DUP_202011110046	Total Suspended Solids (TSS)	300		274	mg/L		(0-10)	10	9.7
DUP_202011110076	Total Suspended Solids (TSS)	66		62.0	mg/L		(0-10)	10	6.3
LCS1	Total Suspended Solids (TSS)		175	172	mg/L	98	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	174	mg/L	99	(71-107)	20	1.2
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	10.0	mg/L	100	(50-150)		

ICP Metals by EPA 200.7

Analytical Batch: 1295535

Analysis Date: 12/22/2020

LCS1	Calcium Total ICAP		50	50.8	mg/L	102	(85-115)		
LCS2	Calcium Total ICAP		50	50.9	mg/L	102	(85-115)	20	0.0
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	1.00	mg/L	100	(50-150)		
MS_202012170229	Calcium Total ICAP	35	50	83.7	mg/L	97	(70-130)		
MS2_202012180352	Calcium Total ICAP	3.3	50	54.4	mg/L	102	(70-130)		
MSD_202012170229	Calcium Total ICAP	35	50	83.8	mg/L	98	(70-130)	20	0.11
MSD2_202012180352	Calcium Total ICAP	3.3	50	54.1	mg/L	102	(70-130)	20	0.56

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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(I) - Indicates internal standard compound.

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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Iron Total ICAP		5	5.10	mg/L	102	(85-115)		
LCS2	Iron Total ICAP		5	5.10	mg/L	102	(85-115)	20	0.0
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0206	mg/L	103	(50-150)		
MS_202012170229	Iron Total ICAP	ND	5	5.11	mg/L	102	(70-130)		
MS2_202012180352	Iron Total ICAP	ND	5	5.11	mg/L	102	(70-130)		
MSD_202012170229	Iron Total ICAP	ND	5	5.12	mg/L	102	(70-130)	20	0.12
MSD2_202012180352	Iron Total ICAP	ND	5	5.10	mg/L	102	(70-130)	20	0.003 1
LCS1	Magnesium Total ICAP		20	20.2	mg/L	101	(85-115)		
LCS2	Magnesium Total ICAP		20	20.2	mg/L	101	(85-115)	20	0.0
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0951	mg/L	95	(50-150)		
MS_202012170229	Magnesium Total ICAP	12	20	32.3	mg/L	100	(70-130)		
MS2_202012180352	Magnesium Total ICAP	0.16	20	20.6	mg/L	102	(70-130)		
MSD_202012170229	Magnesium Total ICAP	12	20	32.3	mg/L	101	(70-130)	20	0.091
MSD2_202012180352	Magnesium Total ICAP	0.16	20	20.6	mg/L	102	(70-130)	20	0.22
LCS1	Potassium Total ICAP		20	20.0	mg/L	100	(85-115)		
LCS2	Potassium Total ICAP		20	20.0	mg/L	100	(85-115)	20	0.0
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.624	mg/L	62	(50-150)		
MS_202012170229	Potassium Total ICAP	1.2	20	22.3	mg/L	106	(70-130)		
MS2_202012180352	Potassium Total ICAP	ND	20	21.2	mg/L	105	(70-130)		
MSD_202012170229	Potassium Total ICAP	1.2	20	22.3	mg/L	106	(70-130)	20	0.087
MSD2_202012180352	Potassium Total ICAP	ND	20	21.1	mg/L	105	(70-130)	20	0.48
LCS1	Sodium Total ICAP		50	50.2	mg/L	100	(85-115)		
LCS2	Sodium Total ICAP		50	50.5	mg/L	101	(85-115)	20	0.60
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.945	mg/L	95	(50-150)		
MS_202012170229	Sodium Total ICAP	9.9	50	58.7	mg/L	98	(70-130)		
MS2_202012180352	Sodium Total ICAP	3.6	50	53.0	mg/L	99	(70-130)		
MSD_202012170229	Sodium Total ICAP	9.9	50	58.8	mg/L	98	(70-130)	20	0.10
MSD2_202012180352	Sodium Total ICAP	3.6	50	53.0	mg/L	99	(70-130)	20	0.014

Volatile Organics by GCMS by EPA 524.2

Analytical Batch: 1295542

Analysis Date: 12/21/2020

LCS1	1,1,1,2-Tetrachloroethane		5	4.56	ug/L	91	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	4.66	ug/L	93	(70-130)	20	2.2
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 909215  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.440	ug/L	88	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.68	ug/L	94	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.63	ug/L	93	(70-130)	20	1.1
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.00	ug/L	100	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	5.29	ug/L	106	(70-130)	20	5.6
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.78	ug/L	96	(70-130)		
LCS2	1,1,2-Trichloroethane		5	5.03	ug/L	101	(70-130)	20	5.1
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,1-Dichloroethane		5	4.72	ug/L	94	(70-130)		
LCS2	1,1-Dichloroethane		5	4.91	ug/L	98	(70-130)	20	4.0
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,1-Dichloroethylene		5	5.02	ug/L	100	(70-130)		
LCS2	1,1-Dichloroethylene		5	5.12	ug/L	102	(70-130)	20	2.0
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,1-Dichloropropene		5	4.83	ug/L	97	(70-130)		
LCS2	1,1-Dichloropropene		5	4.87	ug/L	97	(70-130)	20	0.83
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	5.08	ug/L	102	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	5.14	ug/L	103	(70-130)	20	1.2
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.780	ug/L	<b>156</b>	(50-150)		
LCS1	1,2,3-Trichloropropane		5	4.98	ug/L	100	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.25	ug/L	105	(70-130)	20	5.3
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.580	ug/L	116	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	5.08	ug/L	102	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	5.14	ug/L	103	(70-130)	20	1.2
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.730	ug/L	146	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.91	ug/L	98	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 909215  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	1,2,4-Trimethylbenzene		5	5.04	ug/L	101	(70-130)	20	2.6
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,2-Dichloroethane		5	4.87	ug/L	97	(70-130)		
LCS2	1,2-Dichloroethane		5	4.99	ug/L	100	(70-130)	20	2.4
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	99.4	%	99	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			104	%	104	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
LCS1	1,2-Dichloropropane		5	4.90	ug/L	98	(70-130)		
LCS2	1,2-Dichloropropane		5	4.96	ug/L	99	(70-130)	20	1.2
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.93	ug/L	99	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	5.05	ug/L	101	(70-130)	20	2.4
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,3-Dichloropropane		5	4.82	ug/L	96	(70-130)		
LCS2	1,3-Dichloropropane		5	5.11	ug/L	102	(70-130)	20	5.8
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.510	ug/L	102	(50-150)		
LCS1	2,2-Dichloropropane		5	4.50	ug/L	90	(70-130)		
LCS2	2,2-Dichloropropane		5	4.24	ug/L	85	(70-130)	20	6.0
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.480	ug/L	96	(50-150)		
LCS1	2-Butanone (MEK)		50	51.0	ug/L	102	(70-130)		
LCS2	2-Butanone (MEK)		50	52.2	ug/L	104	(70-130)	20	2.3
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.40	ug/L	108	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	98.2	%	98	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	101	%	101	(70-130)		
MBLK	4-Bromofluorobenzene (S)			101	%	101	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	97.0	%	97	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	99.2	%	99	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	54.5	ug/L	109	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	4-Methyl-2-Pentanone (MIBK)		50	56.6	ug/L	113	(70-130)	20	3.8
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.95	ug/L	99	(50-150)		
LCS1	Benzene		5	5.05	ug/L	101	(70-130)		
LCS2	Benzene		5	5.12	ug/L	102	(70-130)	20	1.4
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.540	ug/L	108	(50-150)		
LCS1	Bromobenzene		5	4.89	ug/L	98	(70-130)		
LCS2	Bromobenzene		5	5.03	ug/L	101	(70-130)	20	2.8
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.540	ug/L	108	(50-150)		
LCS1	Bromochloromethane		5	4.62	ug/L	92	(70-130)		
LCS2	Bromochloromethane		5	4.68	ug/L	94	(70-130)	20	1.3
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Bromodichloromethane		5	4.19	ug/L	84	(70-130)		
LCS2	Bromodichloromethane		5	4.28	ug/L	86	(70-130)	20	2.1
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.440	ug/L	88	(50-150)		
LCS1	Bromoethane		5	4.80	ug/L	96	(70-130)		
LCS2	Bromoethane		5	4.97	ug/L	99	(70-130)	20	3.5
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	Bromoform		5	3.70	ug/L	74	(70-130)		
LCS2	Bromoform		5	3.74	ug/L	75	(70-130)	20	1.1
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.390	ug/L	78	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.08	ug/L	102	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.40	ug/L	108	(70-130)	20	6.1
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.490	ug/L	98	(50-150)		
LCS1	Carbon disulfide		5	4.79	ug/L	96	(70-130)		
LCS2	Carbon disulfide		5	4.91	ug/L	98	(70-130)	20	2.5
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.500	ug/L	100	(50-150)		
LCS1	Carbon Tetrachloride		5	4.50	ug/L	90	(70-130)		
LCS2	Carbon Tetrachloride		5	4.49	ug/L	90	(70-130)	20	0.22
MBLK	Carbon Tetrachloride			<0.5	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Carbon Tetrachloride		0.5	0.470	ug/L	94	(50-150)		
LCS1	Chlorobenzene		5	4.83	ug/L	97	(70-130)		
LCS2	Chlorobenzene		5	5.00	ug/L	100	(70-130)	20	3.5
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Chlorodibromomethane		5	4.38	ug/L	88	(70-130)		
LCS2	Chlorodibromomethane		5	4.46	ug/L	89	(70-130)	20	1.8
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.450	ug/L	90	(50-150)		
LCS1	Chloroethane		5	5.00	ug/L	100	(70-130)		
LCS2	Chloroethane		5	5.16	ug/L	103	(70-130)	20	3.1
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.57	ug/L	91	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	4.61	ug/L	92	(70-130)	20	0.87
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.510	ug/L	102	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.75	ug/L	95	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	5.23	ug/L	105	(70-130)	20	9.6
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.570	ug/L	114	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.67	ug/L	93	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.55	ug/L	91	(70-130)	20	2.6
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.550	ug/L	110	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.23	ug/L	85	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.41	ug/L	88	(70-130)	20	4.2
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.410	ug/L	82	(50-150)		
LCS1	Dibromomethane		5	4.58	ug/L	92	(70-130)		
LCS2	Dibromomethane		5	4.64	ug/L	93	(70-130)	20	1.3
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Dichlorodifluoromethane		5	5.85	ug/L	117	(70-130)		
LCS2	Dichlorodifluoromethane		5	6.05	ug/L	121	(70-130)	20	3.4
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	Dichloromethane		5	4.37	ug/L	87	(70-130)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Dichloromethane		5	4.56	ug/L	91	(70-130)	20	4.3
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Di-isopropyl ether		5	4.70	ug/L	94	(70-130)		
LCS2	Di-isopropyl ether		5	4.83	ug/L	97	(70-130)	20	2.7
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.500	ug/L	100	(50-150)		
LCS1	Ethyl benzene		5	4.93	ug/L	99	(70-130)		
LCS2	Ethyl benzene		5	5.11	ug/L	102	(70-130)	20	3.6
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Hexachlorobutadiene		5	5.19	ug/L	104	(70-130)		
LCS2	Hexachlorobutadiene		5	5.22	ug/L	104	(70-130)	20	0.58
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.800	ug/L	<b>160</b>	(50-150)		
LCS1	Isopropylbenzene		5	5.04	ug/L	101	(70-130)		
LCS2	Isopropylbenzene		5	5.17	ug/L	103	(70-130)	20	2.5
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	m,p-Xylenes		10	9.97	ug/L	100	(70-130)		
LCS2	m,p-Xylenes		10	10.3	ug/L	103	(70-130)	20	3.3
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.990	ug/L	99	(50-150)		
MRLW	m,p-Xylenes		0.5	0.570	ug/L	114	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.82	ug/L	96	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	4.98	ug/L	100	(70-130)	20	3.3
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.550	ug/L	110	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	4.99	ug/L	100	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	5.00	ug/L	100	(70-130)	20	0.20
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Naphthalene		5	5.32	ug/L	106	(70-130)		
LCS2	Naphthalene		5	5.36	ug/L	107	(70-130)	20	0.75
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.740	ug/L	148	(50-150)		
LCS1	n-Butylbenzene		5	4.98	ug/L	100	(70-130)		
LCS2	n-Butylbenzene		5	5.10	ug/L	102	(70-130)	20	2.4

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.600	ug/L	120	(50-150)		
LCS1	n-Propylbenzene		5	4.87	ug/L	97	(70-130)		
LCS2	n-Propylbenzene		5	5.10	ug/L	102	(70-130)	20	4.6
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.560	ug/L	112	(50-150)		
LCS1	o-Chlorotoluene		5	4.79	ug/L	96	(70-130)		
LCS2	o-Chlorotoluene		5	4.94	ug/L	99	(70-130)	20	3.1
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.560	ug/L	112	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.94	ug/L	99	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	5.05	ug/L	101	(70-130)	20	2.2
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.590	ug/L	118	(50-150)		
LCS1	o-Xylene		5	4.85	ug/L	97	(70-130)		
LCS2	o-Xylene		5	4.96	ug/L	99	(70-130)	20	2.2
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.480	ug/L	96	(50-150)		
LCS1	p-Chlorotoluene		5	4.84	ug/L	97	(70-130)		
LCS2	p-Chlorotoluene		5	4.96	ug/L	99	(70-130)	20	2.5
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.540	ug/L	108	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	4.88	ug/L	98	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.06	ug/L	101	(70-130)	20	3.6
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.530	ug/L	106	(50-150)		
LCS1	p-Isopropyltoluene		5	5.08	ug/L	102	(70-130)		
LCS2	p-Isopropyltoluene		5	5.19	ug/L	104	(70-130)	20	2.1
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.500	ug/L	100	(50-150)		
LCS1	sec-Butylbenzene		5	5.69	ug/L	114	(70-130)		
LCS2	sec-Butylbenzene		5	5.79	ug/L	116	(70-130)	20	1.7
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Styrene		5	4.93	ug/L	99	(70-130)		
LCS2	Styrene		5	5.15	ug/L	103	(70-130)	20	4.4
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.490	ug/L	98	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	tert-amyl Methyl Ether		5	4.84	ug/L	97	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.84	ug/L	97	(70-130)	20	0.0
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.500	ug/L	100	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	4.98	ug/L	100	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	3.88	ug/L	78	(70-130)	20	<u>25</u>
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.510	ug/L	102	(50-150)		
LCS1	tert-Butylbenzene		5	4.98	ug/L	100	(70-130)		
LCS2	tert-Butylbenzene		5	5.11	ug/L	102	(70-130)	20	2.6
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.82	ug/L	96	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.95	ug/L	99	(70-130)	20	2.7
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Toluene		5	4.91	ug/L	98	(70-130)		
LCS2	Toluene		5	4.98	ug/L	100	(70-130)	20	1.4
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.530	ug/L	106	(50-150)		
LCS1	Toluene-d8 (S)		5	99.4	%	99	(70-130)		
LCS2	Toluene-d8 (S)		5	101	%	101	(70-130)		
MBLK	Toluene-d8 (S)			96.6	%	97	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	97.0	%	97	(70-130)		
MRL_LW	Toluene-d8 (S)		5	98.6	%	99	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.74	ug/L	95	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	4.76	ug/L	95	(70-130)	20	0.42
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.510	ug/L	102	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.25	ug/L	85	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.30	ug/L	86	(70-130)	20	1.2
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.410	ug/L	82	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.89	ug/L	98	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.96	ug/L	99	(70-130)	20	1.4
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.550	ug/L	110	(50-150)		
LCS1	Trichlorofluoromethane		5	5.14	ug/L	103	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 909215  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Trichlorofluoromethane		5	5.19	ug/L	104	(70-130)	20	0.97
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	5.25	ug/L	105	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	5.31	ug/L	106	(70-130)	20	1.1
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.550	ug/L	110	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.65	ug/L	93	(70-130)		
LCS2	Vinyl chloride (VC)		5	4.43	ug/L	89	(70-130)	20	4.8
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.490	ug/L	98	(50-150)		
MRLLW	Vinyl chloride (VC)		0.25	0.270	ug/L	108	(50-150)		

**Total Dissolved Solids (TDS) by E160.1/SM2540C**

Analytical Batch: 1295777

Analysis Date: 12/22/2020

DUP_202012170235	Total Dissolved Solid (TDS)	270		264	mg/L		(0-10)	10	0.76
DUP_202012170630	Total Dissolved Solid (TDS)	520		528	mg/L		(0-10)	10	1.9
LCS1	Total Dissolved Solid (TDS)		175	170	mg/L	97	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	698	mg/L	100	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	7.00	mg/L	70	(50-150)		

**Hexavalent chromium(Dissolved) by EPA 218.6**

Analytical Batch: 1295808

Analysis Date: 12/22/2020

LCS1	Hexavalent chromium(Dissolved)		2	2.00	ug/L	100	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	2.00	ug/L	100	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0121	ug/L	61	(50-150)		
MS_202011100648	Hexavalent chromium(Dissolved)	0.30	2	2.42	ug/L	106	(90-110)		
MSD_202011100648	Hexavalent chromium(Dissolved)	0.30	2	2.43	ug/L	106	(90-110)	20	0.45

**EPA Method 537.1 by EPA 537.1**

Prep Batch: 1295045 Analytical Batch: 1295814

Analysis Date: 12/22/2020

DUP_202012170406	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0252	ug/L	107	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0252	ug/L	107	(70-130)	30	0.0
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00194	ug/L	103	(50-150)		
MS1_202012170405	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0248	ug/L	105	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202012170406	13C2-PFDA (S)			96.2	%	96	(70-130)		
LCS1	13C2-PFDA (S)		100	106	%	106	(70-130)		
LCS2	13C2-PFDA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFDA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	106	%	106	(70-130)		
MS1_202012170405	13C2-PFDA (S)		100	103	%	103	(70-130)		
DUP_202012170406	13C2-PFHxA (S)			94.4	%	94	(70-130)		
LCS1	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS2	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MBLK	13C2-PFHxA (S)			111	%	111	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	108	%	108	(70-130)		
MS1_202012170405	13C2-PFHxA (S)		100	102	%	102	(70-130)		
DUP_202012170406	13C2-PFOA- IS#1 (I)			106	%	107	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	89.4	%	89	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	93.1	%	93	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			94.5	%	94	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	91.8	%	92	(50-150)		
MS1_202012170405	13C2-PFOA- IS#1 (I)		100	92.9	%	93	(50-150)		
DUP_202012170406	13C3-HFPO-DA (S)			89.6	%	90	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	96.2	%	96	(70-130)		
MBLK	13C3-HFPO-DA (S)			104	%	104	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MS1_202012170405	13C3-HFPO-DA (S)		100	99.8	%	100	(70-130)		
DUP_202012170406	13C4-PFOS- IS#2 (I)			91.6	%	92	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	90.8	%	91	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	92.8	%	93	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			93.4	%	93	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	92.5	%	92	(50-150)		
MS1_202012170405	13C4-PFOS- IS#2 (I)		100	91.4	%	91	(50-150)		
DUP_202012170406	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0277	ug/L	117	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0277	ug/L	117	(70-130)	30	0.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00220	ug/L	116	(50-150)		
MS1_202012170405	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0260	ug/L	110	(70-130)		
DUP_202012170406	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0265	ug/L	114	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0261	ug/L	112	(70-130)	30	1.5
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00203	ug/L	109	(50-150)		
MS1_202012170405	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0260	ug/L	112	(70-130)		
DUP_202012170406	d3-NMeFOSAA (I)			90.7	%	91	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	90.3	%	90	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	94.1	%	94	(50-150)		
MBLK	d3-NMeFOSAA (I)			95.9	%	96	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	93.0	%	93	(50-150)		
MS1_202012170405	d3-NMeFOSAA (I)		100	89.8	%	90	(50-150)		
DUP_202012170406	d5-NEtFOSAA (S)			100	%	100	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	99.3	%	99	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	96.4	%	96	(70-130)		
MBLK	d5-NEtFOSAA (S)			99.4	%	99	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	98.6	%	99	(70-130)		
MS1_202012170405	d5-NEtFOSAA (S)		100	98.4	%	98	(70-130)		
DUP_202012170406	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0266	ug/L	106	(70-130)	30	2.2
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00209	ug/L	104	(50-150)		
MS1_202012170405	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0271	ug/L	108	(70-130)		
DUP_202012170406	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0275	ug/L	110	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0268	ug/L	107	(70-130)	30	2.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS1_202012170405	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0272	ug/L	109	(70-130)		
DUP_202012170406	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0276	ug/L	110	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0274	ug/L	110	(70-130)	30	0.73
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00218	ug/L	109	(50-150)		
MS1_202012170405	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0263	ug/L	105	(70-130)		
DUP_202012170406	Perfluorobutanesulfonic acid (PFBS)	0.0098		0.0105	ug/L		(0-30)	30	6.3
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0237	ug/L	107	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0238	ug/L	108	(70-130)	30	0.84
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00179	ug/L	101	(50-150)		
MS1_202012170405	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0235	ug/L	105	(70-130)		
DUP_202012170406	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0280	ug/L	112	(70-130)	30	0.71
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00224	ug/L	112	(50-150)		
MS1_202012170405	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0263	ug/L	105	(70-130)		
DUP_202012170406	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0266	ug/L	107	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0272	ug/L	109	(70-130)	30	1.9
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202012170405	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0255	ug/L	102	(70-130)		
DUP_202012170406	Perfluoroheptanoic acid (PFHpA)	0.0039		0.00347	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0297	ug/L	119	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0294	ug/L	118	(70-130)	30	1.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00241	ug/L	120	(50-150)		
MS1_202012170405	Perfluoroheptanoic acid (PFHpA)	0.0039	0.025	0.0308	ug/L	108	(70-130)		
DUP_202012170406	Perfluorohexanesulfonic acid (PFHxS)	0.0028		0.00279	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0255	ug/L	112	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0259	ug/L	114	(70-130)	30	1.6
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00201	ug/L	110	(50-150)		
MS1_202012170405	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0249	ug/L	109	(70-130)		
DUP_202012170406	Perfluorohexanoic acid (PFHxA)	0.0079		0.00724	ug/L		(0-30)	30	8.9
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0278	ug/L	111	(70-130)	30	1.8
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00234	ug/L	117	(50-150)		
MS1_202012170405	Perfluorohexanoic acid (PFHxA)	0.0076	0.025	0.0344	ug/L	107	(70-130)		
DUP_202012170406	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0299	ug/L	120	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0297	ug/L	119	(70-130)	30	0.67
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00231	ug/L	116	(50-150)		
MS1_202012170405	Perfluorononanoic acid (PFNA)	ND	0.025	0.0278	ug/L	111	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202012170406	Perfluorooctanesulfonic acid (PFOS)	0.0072		0.00704	ug/L		(0-30)	30	2.3
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0259	ug/L	112	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0264	ug/L	114	(70-130)	30	1.9
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00206	ug/L	111	(50-150)		
MS1_202012170405	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0255	ug/L	110	(70-130)		
DUP_202012170406	Perfluorooctanoic acid (PFOA)	0.0099		0.00938	ug/L		(0-30)	30	5.5
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0284	ug/L	114	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0285	ug/L	114	(70-130)	30	0.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00231	ug/L	116	(50-150)		
MS1_202012170405	Perfluorooctanoic acid (PFOA)	0.0024	0.025	0.0294	ug/L	108	(70-130)		
DUP_202012170406	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0276	ug/L	110	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0275	ug/L	110	(70-130)	30	0.36
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00213	ug/L	106	(50-150)		
MS1_202012170405	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0256	ug/L	102	(70-130)		
DUP_202012170406	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0266	ug/L	107	(70-130)	30	0.38
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00200	ug/L	100	(50-150)		
MS1_202012170405	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0243	ug/L	97	(70-130)		
DUP_202012170406	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0279	ug/L	112	(70-130)	30	0.36
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00215	ug/L	107	(50-150)		
MS1_202012170405	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0267	ug/L	107	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1295306 Analytical Batch: 1295815

Analysis Date: 12/23/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0469	ug/L	100	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0477	ug/L	101	(70-130)	30	1.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00188	ug/L	100	(50-150)		
MS_202012180350	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00193	ug/L	101	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202012180350	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00182	ug/L	96	(50-150)	50	5.7
LCS3	13C2-PFDA (S)		100	104	%	104	(70-130)		
LCS4	13C2-PFDA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFDA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	109	%	109	(70-130)		
MS_202012180350	13C2-PFDA (S)		100	109	%	109	(70-130)		
MSD_202012180350	13C2-PFDA (S)		100	109	%	109	(70-130)		
LCS3	13C2-PFHxA (S)		100	111	%	111	(70-130)		
LCS4	13C2-PFHxA (S)		100	106	%	107	(70-130)		
MBLK	13C2-PFHxA (S)			99.7	%	100	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	104	%	104	(70-130)		
MS_202012180350	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MSD_202012180350	13C2-PFHxA (S)		100	105	%	105	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	99.8	%	100	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	96.4	%	96	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			99.8	%	100	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MS_202012180350	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MSD_202012180350	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MBLK	13C3-HFPO-DA (S)			91.4	%	91	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	99.7	%	100	(70-130)		
MS_202012180350	13C3-HFPO-DA (S)		100	98.4	%	98	(70-130)		
MSD_202012180350	13C3-HFPO-DA (S)		100	94.5	%	95	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	96.5	%	96	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	91.4	%	91	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			93.5	%	93	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	96.9	%	97	(50-150)		
MS_202012180350	13C4-PFOS- IS#2 (I)		100	97.6	%	98	(50-150)		
MSD_202012180350	13C4-PFOS- IS#2 (I)		100	99.8	%	100	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0465	ug/L	96	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0462	ug/L	95	(70-130)	30	0.65
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00193	ug/L	102	(50-150)		
MS_202012180350	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00198	ug/L	105	(50-150)		
MSD_202012180350	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00191	ug/L	101	(50-150)	50	3.8
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0468	ug/L	101	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0485	ug/L	104	(70-130)	30	3.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00201	ug/L	108	(50-150)		
MS_202012180350	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00199	ug/L	106	(50-150)		
MSD_202012180350	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00192	ug/L	102	(50-150)	50	3.8
LCS3	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MBLK	d3-NMeFOSAA (I)			103	%	103	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MS_202012180350	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MSD_202012180350	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	108	%	108	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MBLK	d5-NEtFOSAA (S)			110	%	110	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
MS_202012180350	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
MSD_202012180350	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0463	ug/L	93	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0476	ug/L	95	(70-130)	30	2.8
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00202	ug/L	101	(50-150)		
MS_202012180350	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00180	ug/L	90	(50-150)		
MSD_202012180350	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00172	ug/L	86	(50-150)	50	4.5
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0510	ug/L	102	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0497	ug/L	99	(70-130)	30	2.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00207	ug/L	104	(50-150)		
MS_202012180350	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00217	ug/L	107	(50-150)		
MSD_202012180350	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00195	ug/L	96	(50-150)	50	11
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0508	ug/L	102	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0490	ug/L	98	(70-130)	30	3.6
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00212	ug/L	106	(50-150)		
MS_202012180350	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00208	ug/L	101	(50-150)		
MSD_202012180350	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00210	ug/L	103	(50-150)	50	1.1
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0428	ug/L	97	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0451	ug/L	102	(70-130)	30	5.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00184	ug/L	104	(50-150)		
MS_202012180350	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00184	ug/L	103	(50-150)		
MSD_202012180350	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00177	ug/L	100	(50-150)	50	3.7
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0494	ug/L	99	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0514	ug/L	103	(70-130)	30	4.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202012180350	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00207	ug/L	102	(50-150)		
MSD_202012180350	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00211	ug/L	104	(50-150)	50	1.9
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0457	ug/L	91	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0453	ug/L	91	(70-130)	30	0.88
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00182	ug/L	91	(50-150)		
MS_202012180350	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00185	ug/L	92	(50-150)		
MSD_202012180350	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00184	ug/L	91	(50-150)	50	0.57
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0491	ug/L	98	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0476	ug/L	95	(70-130)	30	3.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202012180350	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00215	ug/L	106	(50-150)		
MSD_202012180350	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00210	ug/L	104	(50-150)	50	2.2
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0469	ug/L	103	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0486	ug/L	107	(70-130)	30	3.6
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00200	ug/L	110	(50-150)		
MS_202012180350	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00205	ug/L	112	(50-150)		
MSD_202012180350	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00189	ug/L	103	(50-150)	50	8.1
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0499	ug/L	100	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0496	ug/L	99	(70-130)	30	0.60
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00209	ug/L	104	(50-150)		
MS_202012180350	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00220	ug/L	107	(50-150)		
MSD_202012180350	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00210	ug/L	102	(50-150)	50	4.8
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0494	ug/L	99	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0511	ug/L	102	(70-130)	30	3.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00226	ug/L	113	(50-150)		
MS_202012180350	Perfluorononanoic acid (PFNA)	ND	0.002	0.00224	ug/L	111	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 909215  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202012180350	Perfluorononanoic acid (PFNA)	ND	0.002	0.00220	ug/L	109	(50-150)	50	2.0
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0475	ug/L	103	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0487	ug/L	105	(70-130)	30	2.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00207	ug/L	112	(50-150)		
MS_202012180350	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00208	ug/L	108	(50-150)		
MSD_202012180350	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00204	ug/L	106	(50-150)	50	1.9
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0514	ug/L	103	(70-130)	30	0.59
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00226	ug/L	113	(50-150)		
MS_202012180350	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00229	ug/L	109	(50-150)		
MSD_202012180350	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00226	ug/L	108	(50-150)	50	1.1
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0467	ug/L	93	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0484	ug/L	97	(70-130)	30	3.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00184	ug/L	92	(50-150)		
MS_202012180350	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00195	ug/L	95	(50-150)		
MSD_202012180350	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00193	ug/L	94	(50-150)	50	1.2
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0458	ug/L	92	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0461	ug/L	92	(70-130)	30	0.44
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00186	ug/L	93	(50-150)		
MS_202012180350	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00191	ug/L	95	(50-150)		
MSD_202012180350	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00188	ug/L	93	(50-150)	50	1.8
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0506	ug/L	101	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0534	ug/L	107	(70-130)	30	5.4
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202012180350	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00222	ug/L	110	(50-150)		
MSD_202012180350	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00215	ug/L	106	(50-150)	50	3.4

EPA Method 537.1 by EPA 537.1

Prep Batch: 1295349 Analytical Batch: 1295820

Analysis Date: 12/23/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0454	ug/L	96	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0450	ug/L	96	(70-130)	30	0.89
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00194	ug/L	103	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202012180328	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0243	ug/L	103	(70-130)		
MSD1_202012180328	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0240	ug/L	102	(70-130)	30	1.4
LCS3	13C2-PFDA (S)		100	109	%	109	(70-130)		
LCS4	13C2-PFDA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFDA (S)			105	%	105	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	106	%	106	(70-130)		
MS1_202012180328	13C2-PFDA (S)		100	104	%	104	(70-130)		
MSD1_202012180328	13C2-PFDA (S)		100	104	%	104	(70-130)		
LCS3	13C2-PFHxA (S)		100	105	%	105	(70-130)		
LCS4	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MBLK	13C2-PFHxA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	103	%	103	(70-130)		
MS1_202012180328	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MSD1_202012180328	13C2-PFHxA (S)		100	100	%	100	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	95.7	%	96	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	96.3	%	96	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			97.1	%	97	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	99.7	%	100	(50-150)		
MS1_202012180328	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MSD1_202012180328	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MBLK	13C3-HFPO-DA (S)			100	%	101	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	100	%	100	(70-130)		
MS1_202012180328	13C3-HFPO-DA (S)		100	96.7	%	97	(70-130)		
MSD1_202012180328	13C3-HFPO-DA (S)		100	95.3	%	95	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	95.6	%	96	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	96.8	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			96.1	%	96	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	96.4	%	96	(50-150)		
MS1_202012180328	13C4-PFOS- IS#2 (I)		100	93.6	%	94	(50-150)		
MSD1_202012180328	13C4-PFOS- IS#2 (I)		100	95.2	%	95	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0468	ug/L	97	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0487	ug/L	100	(70-130)	30	4.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00221	ug/L	117	(50-150)		
MS1_202012180328	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0240	ug/L	102	(70-130)		
MSD1_202012180328	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0246	ug/L	104	(70-130)	30	2.4

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0460	ug/L	99	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0460	ug/L	99	(70-130)	30	0.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00210	ug/L	113	(50-150)		
MS1_202012180328	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0250	ug/L	107	(70-130)		
MSD1_202012180328	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0251	ug/L	108	(70-130)	30	0.29
LCS3	d3-NMeFOSAA (I)		100	111	%	111	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
MBLK	d3-NMeFOSAA (I)			111	%	111	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
MS1_202012180328	d3-NMeFOSAA (I)		100	111	%	111	(50-150)		
MSD1_202012180328	d3-NMeFOSAA (I)		100	113	%	113	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	98.6	%	99	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	99.4	%	99	(70-130)		
MBLK	d5-NEtFOSAA (S)			94.5	%	95	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	97.0	%	97	(70-130)		
MS1_202012180328	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MSD1_202012180328	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0499	ug/L	100	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0489	ug/L	98	(70-130)	30	2.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00226	ug/L	113	(50-150)		
MS1_202012180328	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0240	ug/L	96	(70-130)		
MSD1_202012180328	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0245	ug/L	98	(70-130)	30	2.0
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0484	ug/L	97	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0490	ug/L	98	(70-130)	30	1.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00222	ug/L	111	(50-150)		
MS1_202012180328	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0257	ug/L	103	(70-130)		
MSD1_202012180328	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0248	ug/L	99	(70-130)	30	3.6
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0499	ug/L	100	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0509	ug/L	102	(70-130)	30	2.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00223	ug/L	111	(50-150)		
MS1_202012180328	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0269	ug/L	107	(70-130)		
MSD1_202012180328	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0265	ug/L	106	(70-130)	30	1.4
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0479	ug/L	108	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0474	ug/L	107	(70-130)	30	1.1

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00215	ug/L	121	(50-150)		
MS1_202012180328	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0257	ug/L	116	(70-130)		
MSD1_202012180328	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0261	ug/L	118	(70-130)	30	1.6
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0519	ug/L	104	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0508	ug/L	102	(70-130)	30	2.1
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00239	ug/L	120	(50-150)		
MS1_202012180328	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0258	ug/L	103	(70-130)		
MSD1_202012180328	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0261	ug/L	104	(70-130)	30	1.2
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0451	ug/L	90	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0433	ug/L	87	(70-130)	30	4.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00185	ug/L	93	(50-150)		
MS1_202012180328	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0225	ug/L	90	(70-130)		
MSD1_202012180328	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0232	ug/L	93	(70-130)	30	3.1
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0490	ug/L	98	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0481	ug/L	96	(70-130)	30	2.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00231	ug/L	115	(50-150)		
MS1_202012180328	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0252	ug/L	101	(70-130)		
MSD1_202012180328	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0263	ug/L	105	(70-130)	30	4.5
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0489	ug/L	107	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0496	ug/L	109	(70-130)	30	1.4
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00222	ug/L	122	(50-150)		
MS1_202012180328	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0251	ug/L	110	(70-130)		
MSD1_202012180328	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0262	ug/L	115	(70-130)	30	4.2
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0509	ug/L	102	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0519	ug/L	104	(70-130)	30	2.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00232	ug/L	116	(50-150)		
MS1_202012180328	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0262	ug/L	104	(70-130)		
MSD1_202012180328	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0264	ug/L	105	(70-130)	30	0.86
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0546	ug/L	109	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0529	ug/L	106	(70-130)	30	3.2
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00247	ug/L	124	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 909215  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202012180328	Perfluorononanoic acid (PFNA)	ND	0.025	0.0267	ug/L	107	(70-130)		
MSD1_202012180328	Perfluorononanoic acid (PFNA)	ND	0.025	0.0280	ug/L	112	(70-130)	30	4.8
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0481	ug/L	104	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0481	ug/L	104	(70-130)	30	0.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00227	ug/L	123	(50-150)		
MS1_202012180328	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0254	ug/L	109	(70-130)		
MSD1_202012180328	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0260	ug/L	112	(70-130)	30	2.7
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0532	ug/L	106	(70-130)	30	0.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00260	ug/L	130	(50-150)		
MS1_202012180328	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0280	ug/L	112	(70-130)		
MSD1_202012180328	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0286	ug/L	114	(70-130)	30	1.9
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0480	ug/L	96	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0469	ug/L	94	(70-130)	30	2.3
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00209	ug/L	104	(50-150)		
MS1_202012180328	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0237	ug/L	95	(70-130)		
MSD1_202012180328	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0242	ug/L	97	(70-130)	30	2.1
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0451	ug/L	90	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0454	ug/L	91	(70-130)	30	0.66
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00192	ug/L	96	(50-150)		
MS1_202012180328	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0233	ug/L	93	(70-130)		
MSD1_202012180328	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0252	ug/L	101	(70-130)	30	7.9
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0519	ug/L	104	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0521	ug/L	104	(70-130)	30	0.39
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00233	ug/L	116	(50-150)		
MS1_202012180328	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0267	ug/L	107	(70-130)		
MSD1_202012180328	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0276	ug/L	110	(70-130)	30	3.3

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1296968

Analysis Date: 12/30/2020

LCS1	Alkalinity in CaCO3 units	100	100	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units	100	97.3	mg/L	97	(90-110)	20	2.7
MBLK	Alkalinity in CaCO3 units		<1	mg/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Alkalinity in CaCO3 units		2	1.79	mg/L	90	(50-150)		
MS_202012180213	Alkalinity in CaCO3 units	66	100	113	mg/L	<u>47</u>	(80-120)		
MS_202012230409	Alkalinity in CaCO3 units	26	100	122	mg/L	97	(80-120)		
MSD_202012180213	Alkalinity in CaCO3 units	66	100	110	mg/L	<u>44</u>	(80-120)	20	3.1
MSD_202012230409	Alkalinity in CaCO3 units	26	100	129	mg/L	103	(80-120)	20	5.1

Perchlorate by EPA 314.0

Analytical Batch: 1297375

Analysis Date: 12/31/2020

LCS1	Perchlorate		25	24.9	ug/L	100	(85-115)		
LCS2	Perchlorate		25	25.4	ug/L	102	(85-115)	15	2.4
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	4.04	ug/L	101	(75-125)		
MS_202012080214	Perchlorate	ND	25	23.0	ug/L	92	(80-120)		
MSD_202012080214	Perchlorate	ND	25	22.6	ug/L	90	(80-120)	15	1.9

Total Organic Carbon by SM 5310C

Analytical Batch: 1299085

Analysis Date: 01/12/2021

LCS1	Total Organic Carbon		5	5.32	mg/L	106	(90-110)		
LCS2	Total Organic Carbon		5	5.36	mg/L	107	(90-110)	20	0.75
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.236	mg/L	118	(50-150)		
MS_202012170066	Total Organic Carbon	4.1	4	8.51	mg/L	110	(80-120)		
MSD_202012170066	Total Organic Carbon	4.1	4	8.48	mg/L	109	(80-120)	20	0.24

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 01/13/2021

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 01/13/2021

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 01/13/2021

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large), MPN/100 mL (Total Coliform, E. Coli), Presence/Absence (P/A)\* (Total Coliform, E. Coli)

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 01/13/2021

Quant Report - Page 1 of 1

, Tel Fax



## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-46686-1  
Client Project/Site: 909215

For:  
Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:  
12/29/2020 8:18:16 AM

Lori Thompson, Project Manager I  
(714)895-5494  
[Lori.Thompson@eurofinset.com](mailto:Lori.Thompson@eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 909215

Job ID: 570-46686-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⌘	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 909215

Job ID: 570-46686-1

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**Job ID: 570-46686-1**

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**Laboratory: Eurofins Calscience LLC**

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**Narrative**

**Job Narrative**  
**570-46686-1**

**Comments**

No additional comments.

**Receipt**

The sample was received on 12/18/2020 11:10 AM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.0° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-118199. LCS/LCSD were performed to meet requirements.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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# Detection Summary

Client: Eurofins Eaton Analytical  
Project/Site: 909215

Job ID: 570-46686-1

**Client Sample ID: 202012170418**

**Lab Sample ID: 570-46686-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	0.956		0.956	0.765	mg/L	1		1664A	Total/NA

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This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 909215

Job ID: 570-46686-1

## General Chemistry

Client Sample ID: 202012170418

Date Collected: 12/17/20 12:21

Date Received: 12/18/20 11:10

Lab Sample ID: 570-46686-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	0.956		0.956	0.765	mg/L		12/22/20 15:43	12/28/20 10:49	1

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# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 909215

Job ID: 570-46686-1

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 570-118199/1-A**  
**Matrix: Water**  
**Analysis Batch: 118911**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 118199**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		12/22/20 15:43	12/28/20 10:49	1

**Lab Sample ID: LCS 570-118199/2-A**  
**Matrix: Water**  
**Analysis Batch: 118911**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 118199**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	36.70		mg/L		92	78 - 114

**Lab Sample ID: LCSD 570-118199/3-A**  
**Matrix: Water**  
**Analysis Batch: 118911**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 118199**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	36.80		mg/L		92	78 - 114	0	18

# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 909215

Job ID: 570-46686-1

## General Chemistry

### Prep Batch: 118199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-46686-1	202012170418	Total/NA	Water	1664A	
MB 570-118199/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-118199/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-118199/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

### Analysis Batch: 118911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-46686-1	202012170418	Total/NA	Water	1664A	118199
MB 570-118199/1-A	Method Blank	Total/NA	Water	1664A	118199
LCS 570-118199/2-A	Lab Control Sample	Total/NA	Water	1664A	118199
LCSD 570-118199/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	118199



# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 909215

Job ID: 570-46686-1

**Client Sample ID: 202012170418**

**Lab Sample ID: 570-46686-1**

**Date Collected: 12/17/20 12:21**

**Matrix: Water**

**Date Received: 12/18/20 11:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1046 mL	1000 mL	118199	12/22/20 15:43	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			118911	12/28/20 10:49	F7UI	ECL 1

Instrument ID: NOEQUIP

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 909215

Job ID: 570-46686-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-30-21
California	SCAQMD LAP	17LA0919	11-30-20 *
California	State	2944	09-30-21
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-21

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Calscience LLC

# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 909215

Job ID: 570-46686-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

**Protocol References:**

1664A = EPA-821-98-002

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 909215

Job ID: 570-46686-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-46686-1	202012170418	Water	12/17/20 12:21	12/18/20 11:10	

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46086  
Date: 12/18/2020

### Submittal Form

**\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!**  
Report & Invoice must have the Folder# 909215 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report.  
Results must have Complete data & QC with Approval Signature.

**eurofins**  
Eaton Analytical

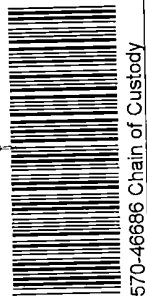
**Ship To:**  
Eurofins CalScience  
7440 Lincoln Way  
Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

**Folder #:** 909215  
**Report Due:** 01/05/2021

**Reports:** Jackie Contreras Sub-Contracting Administrator  
**EMAIL TO:** Eaton-MonroviaSubContract@eurofins.com  
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
Phone (626) 386-1165 Fax (626) 386-1122  
**Invoices to:** Eurofins Eaton Analytical, LLC  
**Accounts Payable** 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the  
Specified State Certification # and  
Exp Date for requested tests + matrix  
Samples from CALIFORNIA



570-46686 Chain of Custody

**Sample ID** 202012170418 **Client Sample ID for reference onl** MB-INF-20201217  
**Sample Date & Time Matrix** 12/17/20 1221 DW  
**PWS Systemcode** PWSID  
**JLS**

**Sample type:** Oil and Grease by 1664(subbed)  
**Sample Event:** Analysis Requested  
**Facility ID:** Static ID: JLS

**Method** PA 1664  
**Prep Method** Oil and Grease by 1664(subbed)

**Relinquished by:** [Signature] Date 12/18/20 Time 1110  
**Received by:** [Signature] Date 12/18/20 Time 1110  
**Relinquished by:** [Signature] Date \_\_\_\_\_ Time \_\_\_\_\_  
**Received by:** [Signature] Date \_\_\_\_\_ Time \_\_\_\_\_

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgment of Receipt is requested to affirm Jackie Contreras

2/8/20 scb  
12/29/2020

Page 1 of 1  
750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016 Tel (626) 386-1100 Fax (866) 988-3757 www.EurofinsUS.com/Eaton  
Page 13 of 14

# Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-46686-1

**Login Number: 46686**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Ramos, Maribel**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 915470  
Project: 0250000  
Group: WRD Pilot [Set #1]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

### STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies



ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 915470  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **January 27, 2021 at 1524**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202101270689</u>	GAC-1-20210127	01/27/2021 1013
	@537.1	
<u>202101270690</u>	GAC-2-20210127	01/27/2021 1016
	@537.1	
<u>202101270691</u>	GAC-3-20210127	01/27/2021 1019
	@537.1	
<u>202101270692</u>	GAC-4-20210127	01/27/2021 1022
	@537.1	
<u>202101270694</u>	IX-1-20210127	01/27/2021 1025
	@537.1	
<u>202101270695</u>	IX-2-20210127	01/27/2021 1028
	@537.1	
<u>202101270696</u>	IX-3-20210127	01/27/2021 1031
	@537.1	
<u>202101270697</u>	IX-4-20210127	01/27/2021 1034
	@537.1	
<u>202101270698</u>	GAC-1M-20210127	01/27/2021 1037
	@537.1	
<u>202101270699</u>	GAC-2M-20210127	01/27/2021 1040
	@537.1	
<u>202101270700</u>	GAC-3M-20210127	01/27/2021 1043
	@537.1	
<u>202101270701</u>	GAC-4M-20210127	01/27/2021 1046
	@537.1	
<u>202101270702</u>	IX-1M-20210127	01/27/2021 1049
	@537.1	

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 915470  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **January 27, 2021 at 1524**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202101270703</u>	IX-2M-20210127	01/27/2021 1052
	@537.1	
<u>202101270704</u>	IX-3M-20210127	01/27/2021 1055
	@537.1	
<u>202101270705</u>	IX-4M-20210127	01/27/2021 1058
	@537.1	
<u>202101270710</u>	LH-INF-20210127	01/27/2021 1101
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS
	Chloride	Dissolved Organic Carbon
	Iron Total ICAP	Magnesium Total ICAP
	Oil and Grease by 1664(subbed)	Perchlorate
	Sodium Total ICAP	Sulfate
	Total Hardness as CaCO3 by ICP	Total Organic Carbon
	Uranium by ICPMS as pCi/L	Uranium ICAP/MS
		Calcium Total ICAP
		Hexavalent chromium(Dissolved)
		Manganese Total ICAP/MS
		Potassium Total ICAP
		Total Dissolved Solid (TDS)
		Total Suspended Solids (TSS)
<u>202101270711</u>	IX-5-20210127	01/27/2021 1213
	@537.1	
<u>202101270712</u>	IX-6-20210127	01/27/2021 1216
	@537.1	
<u>202101270713</u>	IX-7-20210127	01/27/2021 1219
	@537.1	
<u>202101270714</u>	IX-8-20210127	01/27/2021 1222
	@537.1	
<u>202101270715</u>	GAC-5-20210127	01/27/2021 1225
	@537.1	
<u>202101270716</u>	GAC-6-20210127	01/27/2021 1228
	@537.1	
<u>202101270717</u>	GAC-7-20210127	01/27/2021 1231

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 915470  
Project: 0250000  
Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

The following samples were received from you on **January 27, 2021 at 1524**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
<u>202101270718</u>	GAC-8-20210127	01/27/2021 1234
	@537.1	
<u>202101270720</u>	MB-INF-20210127	01/27/2021 1301
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS
	Chloride	Dissolved Organic Carbon
	Iron Total ICAP	Magnesium Total ICAP
	Oil and Grease by 1664(subbed)	Perchlorate
	Sodium Total ICAP	Sulfate
	Total Hardness as CaCO3 by ICP	Total Organic Carbon
	Uranium by ICPMS as pCi/L	Uranium ICAP/MS
		Calcium Total ICAP
		Hexavalent chromium(Dissolved)
		Manganese Total ICAP/MS
		Potassium Total ICAP
		Total Dissolved Solid (TDS)
		Total Suspended Solids (TSS)

### Test Description

@537.1 -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

@VOASDWA -- Volatile Organics by GCMS

915470

FROM: GSI Environmental Inc.  
19200 Von Karman Ave, Suite 800  
Irvine, CA 92612  
(949) 679-1070

PROJECT NAME: WRD Pilot  
PROJECT CONTACT: Miae Jeon  
GLOBAL ID:

TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com  
LABORATORY: Eurofins Eaton Analytical

PROJECT NO.: 5302  
LAB CONTACT: Sophia Liang  
SAMPLER(S): (PRINT) RDT

**REQUESTED ANALYSES**  
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION		Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)	DOC		
		DATE	TIME			Unpreserved	Preserved																	
	GAC-1-20210127	1-27-21	1013	Water	2		2		X															
	GAC-2-20210127		1016	Water	1				X															
	GAC-3-20210127		1019	Water					X															
	GAC-4-20210127		1022	Water					X															
	IX-1-20210127		1025	Water					X															
	IX-2-20210127		1028	Water					X															
	IX-3-20210127		1031	Water					X															
	IX-4-20210127		1034	Water					X															
	GAC-1M-20210127		1037	Water					X															
	GAC-2M-20210127		1040	Water					X															
	GAC-3M-20210127		1043	Water					X															
	GAC-4M-20210127		1046	Water					X															
	IX-1M-20210127		1049	Water					X															
	IX-2M-20210127		1052	Water					X															
	IX-3M-20210127		1055	Water					X															
	IX-4M-20210127		1058	Water					X															
	LH-INF-20210127		1101	Water	15		5	10	X															

Received by: (Signature) *Chuck Baecher* Date: 1-27-21 Time: 1524

Relinquished by: (Signature) *Robert Torres*

Relinquished by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_



9154720

FROM: GSI Environmental Inc., 19200 Von Karman Ave, Suite 800, Irvine, CA 92612, (949) 679-1070

PROJECT NAME: WRD Pilot

PROJECT CONTACT: Miaee Jeon

GLOBAL ID:

LABORATORY: Eurofins Eaton Analytical

TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com

PROJECT NO.: 5302

LAB CONTACT: Sophia Liang

SAMPLER(S): (PRINT) RDT

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**REQUESTED ANALYSES**

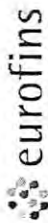
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION		ANALYSES																														
		DATE	TIME			Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO <sub>3</sub> ), Chloride (EPA 300.0)	Alkalinity (as CaCO <sub>3</sub> ), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO <sub>3</sub> (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)																	
	IX-5 - 20210127	1-27	1213	Water	2		2																															
	IX-6 - 20210127		1216	Water																																		
	IX-7 - 20210127		1219	Water																																		
	IX-8 - 20210127		1222	Water																																		
	GAC-5 - 20210127		1225	Water																																		
	GAC-6 - 20210127		1228	Water																																		
	GAC-7 - 20210127		1231	Water																																		
	GAC-8 - 20210127		1234	Water																																		
	<del>IX-5M - 20210127</del>		<del>1237</del>	<del>Water</del>																																		
	<del>IX-6M - 20210127</del>		<del>1240</del>	<del>Water</del>																																		
	<del>IX-7M - 20210127</del>		<del>1243</del>	<del>Water</del>																																		
	<del>IX-8M - 20210127</del>		<del>1246</del>	<del>Water</del>																																		
	<del>GAC-5M - 20210127</del>		<del>1249</del>	<del>Water</del>																																		
	<del>GAC-6M - 20210127</del>		<del>1252</del>	<del>Water</del>																																		
	<del>GAC-7M - 20210127</del>		<del>1255</del>	<del>Water</del>																																		
	<del>GAC-8M - 20210127</del>		<del>1258</del>	<del>Water</del>																																		
	MB-INF - 20210127		1301	Water	15		5		10																													

Received by: (Signature) Shubhankar Date: 1-27-21 Time: 1524

Relinquished by: (Signature) Robert Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_



Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 915470

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 616 (Observation = 13.6 °C) (Corr. Factor = -0.2 °C) (Final = 13.4 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Condition of Ice: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

### Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm
0320	6						
0320	7						

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
	<u>Chuck Brooker</u>	<u>Chuck Brooker</u>	Eurofins Eaton Analytical	<u>1.27.21</u>	<u>1524</u>

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 915470  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---

**Folder Comments**

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove,  
CAELAP 2944 exp 9-30-2021

**Flags Legend:**

LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202101270694</b>				
		<b><u>IX-1-20210127</u></b>				
01/29/2021 22:48	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
01/29/2021 22:48	Perfluorooctanoic acid (PFOA)		0.0029		ug/L	0.0020
		<b>202101270695</b>				
		<b><u>IX-2-20210127</u></b>				
01/29/2021 21:51	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
		<b>202101270696</b>				
		<b><u>IX-3-20210127</u></b>				
01/29/2021 22:58	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
01/29/2021 22:58	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
01/29/2021 22:58	Perfluorooctanoic acid (PFOA)		0.0038		ug/L	0.0020
		<b>202101270697</b>				
		<b><u>IX-4-20210127</u></b>				
01/29/2021 23:08	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
		<b>202101270698</b>				
		<b><u>GAC-1M-20210127</u></b>				
01/29/2021 23:17	Perfluorobutanesulfonic acid (PFBS)		0.0047		ug/L	0.0020
01/29/2021 23:17	Perfluorohexanesulfonic acid (PFHxS)		0.0022		ug/L	0.0020
01/29/2021 23:17	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
01/29/2021 23:17	Perfluorooctanesulfonic acid (PFOS)		0.0050		ug/L	0.0020
01/29/2021 23:17	Perfluorooctanoic acid (PFOA)		0.0060		ug/L	0.0020
		<b>202101270699</b>				
		<b><u>GAC-2M-20210127</u></b>				
01/29/2021 23:38	Perfluorobutanesulfonic acid (PFBS)		0.0049		ug/L	0.0020
01/29/2021 23:38	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
		<b>202101270700</b>				
		<b><u>GAC-3M-20210127</u></b>				
01/29/2021 23:48	Perfluorobutanesulfonic acid (PFBS)		0.0052		ug/L	0.0020
01/29/2021 23:48	Perfluorohexanesulfonic acid (PFHxS)		0.0029		ug/L	0.0020
01/29/2021 23:48	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
01/29/2021 23:48	Perfluorooctanesulfonic acid (PFOS)		0.0048		ug/L	0.0020
01/29/2021 23:48	Perfluorooctanoic acid (PFOA)		0.0064		ug/L	0.0020
		<b>202101270701</b>				
		<b><u>GAC-4M-20210127</u></b>				
01/29/2021 23:58	Perfluorooctanesulfonic acid (PFOS)		0.0022		ug/L	0.0020
01/29/2021 23:58	Perfluorooctanoic acid (PFOA)		0.0020		ug/L	0.0020
		<b>202101270702</b>				
		<b><u>IX-1M-20210127</u></b>				
01/30/2021 00:08	Perfluorohexanoic acid (PFHxA)		0.0027		ug/L	0.0020
01/30/2021 00:08	Perfluorooctanesulfonic acid (PFOS)		0.0044		ug/L	0.0020
01/30/2021 00:08	Perfluorooctanoic acid (PFOA)		0.0064		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202101270703      <u>IX-2M-20210127</u></b>						
01/30/2021 00:17	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
01/30/2021 00:17	Perfluorooctanoic acid (PFOA)		0.0081		ug/L	0.0020
<b>202101270704      <u>IX-3M-20210127</u></b>						
01/30/2021 00:27	Perfluorobutanesulfonic acid (PFBS)		0.0026		ug/L	0.0020
01/30/2021 00:27	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
01/30/2021 00:27	Perfluorooctanoic acid (PFOA)		0.0076		ug/L	0.0020
<b>202101270705      <u>IX-4M-20210127</u></b>						
01/30/2021 00:36	Perfluorobutanesulfonic acid (PFBS)		0.0038		ug/L	0.0020
01/30/2021 00:36	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
01/30/2021 00:36	Perfluorononanoic acid (PFNA)		0.0020		ug/L	0.0020
01/30/2021 00:36	Perfluorooctanesulfonic acid (PFOS)		0.0033		ug/L	0.0020
01/30/2021 00:36	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
<b>202101270710      <u>LH-INF-20210127</u></b>						
01/30/2021 00:36	Alkalinity in CaCO3 units		200		mg/L	2.0
02/03/2021 19:57	Arsenic Total ICAP/MS		2.8	10	ug/L	1.0
01/28/2021 20:40	Calcium Total ICAP		110		mg/L	1.0
01/28/2021 03:24	Chloride		110	250	mg/L	2.5
02/08/2021 15:47	Chloroform (Trichloromethane)		0.77		ug/L	0.50
01/29/2021 12:58	Dissolved Organic Carbon		0.64		mg/L	0.20
01/30/2021 17:49	Hexavalent chromium(Dissolved)		0.80		ug/L	0.020
01/28/2021 20:40	Magnesium Total ICAP		21		mg/L	0.10
01/28/2021 03:24	Nitrate as Nitrogen by IC		2.9	10	mg/L	0.50
01/28/2021 03:24	Nitrate as NO3 (calc)		13	45	mg/L	2.2
02/02/2021 10:33	Oil and Grease by 1664(subbed)		2.52		mg/L	0.971
01/30/2021 00:46	Perfluorobutanesulfonic acid (PFBS)		0.0062		ug/L	0.0020
01/30/2021 00:46	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
01/30/2021 00:46	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
01/30/2021 00:46	Perfluorononanoic acid (PFNA)		0.0028		ug/L	0.0020
01/30/2021 00:46	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
01/30/2021 00:46	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
01/28/2021 20:40	Potassium Total ICAP		4.7		mg/L	1.0
01/28/2021 20:40	Sodium Total ICAP		70		mg/L	1.0
01/28/2021 03:24	Sulfate		170	250	mg/L	2.5
02/02/2021 01:43	Total Dissolved Solids (TDS)		640	500	mg/L	10
01/28/2021 21:23	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0

**SUMMARY OF POSITIVE DATA ONLY**

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
01/28/2021 03:24	Total Nitrate, Nitrite-N, CALC		2.9		mg/L	0.10
01/30/2021 02:15	Total Organic Carbon		1.6		mg/L	0.20
02/08/2021 15:47	Total THM		0.77	80	ug/L	0.50
02/01/2021 17:14	Uranium by ICPMS as pCi/L		3.4		pCi/L	0.70
01/30/2021 03:42	Uranium ICAP/MS		5.1	30	ug/L	1.0
<b>202101270711 IX-5-20210127</b>						
01/30/2021 00:55	Perfluorohexanoic acid (PFHxA)		0.0054		ug/L	0.0020
01/30/2021 00:55	Perfluorooctanoic acid (PFOA)		0.0026		ug/L	0.0020
<b>202101270712 IX-6-20210127</b>						
01/30/2021 01:05	Perfluoroheptanoic acid (PFHpA)		0.0034		ug/L	0.0020
01/30/2021 01:05	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
01/30/2021 01:05	Perfluorooctanoic acid (PFOA)		0.0025		ug/L	0.0020
<b>202101270713 IX-7-20210127</b>						
01/29/2021 19:11	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
01/29/2021 19:11	Perfluorohexanoic acid (PFHxA)		0.0063		ug/L	0.0020
01/29/2021 19:11	Perfluorooctanoic acid (PFOA)		0.0065		ug/L	0.0020
<b>202101270714 IX-8-20210127</b>						
01/29/2021 20:09	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
01/29/2021 20:09	Perfluorohexanoic acid (PFHxA)		0.0063		ug/L	0.0020
01/29/2021 20:09	Perfluorooctanoic acid (PFOA)		0.0028		ug/L	0.0020
<b>202101270715 GAC-5-20210127</b>						
01/29/2021 20:18	Perfluorobutanesulfonic acid (PFBS)		0.0094		ug/L	0.0020
01/29/2021 20:18	Perfluoroheptanoic acid (PFHpA)		0.0030		ug/L	0.0020
01/29/2021 20:18	Perfluorohexanesulfonic acid (PFHxS)		0.0028		ug/L	0.0020
01/29/2021 20:18	Perfluorohexanoic acid (PFHxA)		0.0063		ug/L	0.0020
01/29/2021 20:18	Perfluorooctanesulfonic acid (PFOS)		0.0069		ug/L	0.0020
01/29/2021 20:18	Perfluorooctanoic acid (PFOA)		0.0094		ug/L	0.0020
<b>202101270716 GAC-6-20210127</b>						
01/29/2021 20:28	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
01/29/2021 20:28	Perfluoroheptanoic acid (PFHpA)		0.0050		ug/L	0.0020
01/29/2021 20:28	Perfluorohexanesulfonic acid (PFHxS)		0.0027		ug/L	0.0020
01/29/2021 20:28	Perfluorohexanoic acid (PFHxA)		0.0078		ug/L	0.0020
01/29/2021 20:28	Perfluorooctanoic acid (PFOA)		0.0070		ug/L	0.0020
<b>202101270717 GAC-7-20210127</b>						

**SUMMARY OF POSITIVE DATA ONLY**

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
01/29/2021 20:38	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
01/29/2021 20:38	Perfluoroheptanoic acid (PFHpA)		0.0039		ug/L	0.0020
01/29/2021 20:38	Perfluorohexanesulfonic acid (PFHxS)		0.0045		ug/L	0.0020
01/29/2021 20:38	Perfluorohexanoic acid (PFHxA)		0.0072		ug/L	0.0020
01/29/2021 20:38	Perfluorooctanesulfonic acid (PFOS)		0.0074		ug/L	0.0020
01/29/2021 20:38	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		<b>202101270718</b>	<b><u>GAC-8-20210127</u></b>			
01/29/2021 20:47	Perfluorobutanesulfonic acid (PFBS)		0.0074		ug/L	0.0020
01/29/2021 20:47	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
01/29/2021 20:47	Perfluorohexanoic acid (PFHxA)		0.0056		ug/L	0.0020
01/29/2021 20:47	Perfluorooctanesulfonic acid (PFOS)		0.0025		ug/L	0.0020
01/29/2021 20:47	Perfluorooctanoic acid (PFOA)		0.0044		ug/L	0.0020
		<b>202101270720</b>	<b><u>MB-INF-20210127</u></b>			
01/30/2021 00:28	Alkalinity in CaCO3 units		160		mg/L	2.0
02/03/2021 20:00	Arsenic Total ICAP/MS		1.3	10	ug/L	1.0
01/28/2021 20:41	Calcium Total ICAP		63		mg/L	1.0
01/28/2021 04:03	Chloride		50	250	mg/L	2.5
01/29/2021 13:20	Dissolved Organic Carbon		0.74		mg/L	0.20
02/01/2021 11:54	Hexavalent chromium(Dissolved)		0.47		ug/L	0.020
01/28/2021 20:41	Magnesium Total ICAP		12		mg/L	0.10
01/28/2021 04:03	Nitrate as Nitrogen by IC		2.5	10	mg/L	0.50
01/28/2021 04:03	Nitrate as NO3 (calc)		11	45	mg/L	2.2
02/02/2021 10:33	Oil and Grease by 1664(subbed)		2.33		mg/L	0.973
01/29/2021 20:57	Perfluorobutanesulfonic acid (PFBS)		0.0090		ug/L	0.0020
01/29/2021 20:57	Perfluorodecanoic acid (PFDA)		0.0020		ug/L	0.0020
01/29/2021 20:57	Perfluoroheptanoic acid (PFHpA)		0.0038		ug/L	0.0020
01/29/2021 20:57	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
01/29/2021 20:57	Perfluorohexanoic acid (PFHxA)		0.0063		ug/L	0.0020
01/29/2021 20:57	Perfluorononanoic acid (PFNA)		0.0038		ug/L	0.0020
01/29/2021 20:57	Perfluorooctanesulfonic acid (PFOS)		0.042		ug/L	0.0020
01/29/2021 20:57	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
01/28/2021 20:41	Potassium Total ICAP		3.8		mg/L	1.0
01/28/2021 20:41	Sodium Total ICAP		52		mg/L	1.0
01/28/2021 04:03	Sulfate		74	250	mg/L	2.5
02/02/2021 01:44	Total Dissolved Solids (TDS)		390	500	mg/L	10
01/28/2021 21:23	Total Hardness as CaCO3 by ICP (calc)		210		mg/L	3.0

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

**Report:** 915470  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
01/28/2021 04:03	Total Nitrate, Nitrite-N, CALC		2.5		mg/L	0.10
01/30/2021 02:33	Total Organic Carbon		1.3		mg/L	0.20
02/01/2021 17:14	Uranium by ICPMS as pCi/L		1.2		pCi/L	0.70
01/30/2021 03:45	Uranium ICAP/MS		1.8	30	ug/L	1.0

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20210127 (202101270689)</b>					<b>Sampled on 01/27/2021 1013</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	13C2-PFDA	108	%		1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	13C2-PFHxA	101	%		1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	103	%		1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	103	%		1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	102	%		1

<b>GAC-2-20210127 (202101270690)</b>					<b>Sampled on 01/27/2021 1016</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	13C2-PFDA	105	%		1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	13C2-PFHxA	104	%		1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	102	%		1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	102	%		1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**GAC-3-20210127 (202101270691)**

**Sampled on 01/27/2021 1019**

**EPA 537.1 - EPA Method 537.1**

01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	13C2-PFDA	105	%		1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	13C2-PFHxA	104	%		1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	99	%		1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	105	%		1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**GAC-4-20210127 (202101270692)**

Sampled on 01/27/2021 1022

**EPA 537.1 - EPA Method 537.1**

01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	13C2-PFDA	105	%		1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	13C2-PFHxA	100	%		1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	99	%		1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	101	%		1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**IX-1-20210127 (202101270694)**

**Sampled on 01/27/2021 1025**

**EPA 537.1 - EPA Method 537.1**

01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0029	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	13C2-PFDA	108	%		1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	13C2-PFHxA	103	%		1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	102	%		1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	104	%		1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**IX-2-20210127 (202101270695)**

**Sampled on 01/27/2021 1028**

**EPA 537.1 - EPA Method 537.1**

01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	13C2-PFDA	107	%		1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	13C2-PFHxA	102	%		1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	103	%		1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	104	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	101	%		1
<b>IX-3-20210127 (202101270696)</b>						<b>Sampled on 01/27/2021 1031</b>			
<b>EPA 537.1 - EPA Method 537.1</b>									
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0038	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	13C2-PFDA	109	%		1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	13C2-PFHxA	103	%		1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	104	%		1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	102	%		1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	105	%		1

<b>IX-4-20210127 (202101270697)</b>						<b>Sampled on 01/27/2021 1034</b>			
<b>EPA 537.1 - EPA Method 537.1</b>									
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	13C2-PFDA	107	%		1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	13C2-PFHxA	105	%		1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	105	%		1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	101	%		1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	d5-NETFOSAA	105	%		1

**GAC-1M-20210127 (202101270698)**

Sampled on 01/27/2021 1037

**EPA 537.1 - EPA Method 537.1**

01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0047	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0022	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0050	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0060	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	13C2-PFDA	109	%		1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	13C2-PFHxA	103	%		1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	105	%		1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	102	%		1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**GAC-2M-20210127 (202101270699)**

Sampled on 01/27/2021 1040

**EPA 537.1 - EPA Method 537.1**

01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0049	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	13C2-PFDA	109	%		1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	13C2-PFHxA	106	%		1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	104	%		1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	99	%		1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	106	%		1

**GAC-3M-20210127 (202101270700)**

Sampled on 01/27/2021 1043

**EPA 537.1 - EPA Method 537.1**

01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0052	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0029	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0048	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0064	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	13C2-PFDA	105	%		1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	13C2-PFHxA	103	%		1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	102	%		1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	98	%		1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**GAC-4M-20210127 (202101270701)**

**Sampled on 01/27/2021 1046**

**EPA 537.1 - EPA Method 537.1**

01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0022	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0020	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	13C2-PFDA	107	%		1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	13C2-PFHxA	104	%		1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	102	%		1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	100	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	102	%		1
<b>IX-1M-20210127 (202101270702)</b>						<b>Sampled on 01/27/2021 1049</b>			
<b>EPA 537.1 - EPA Method 537.1</b>									
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0027	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0044	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0064	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	13C2-PFDA	109	%		1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	13C2-PFHxA	106	%		1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	106	%		1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	101	%		1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	104	%		1

<b>IX-2M-20210127 (202101270703)</b>						<b>Sampled on 01/27/2021 1052</b>			
<b>EPA 537.1 - EPA Method 537.1</b>									
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0081	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	13C2-PFDA	106	%		1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	13C2-PFHxA	105	%		1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	103	%		1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	101	%		1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	d5-NETFOSAA	101	%		1

**IX-3M-20210127 (202101270704)**

**Sampled on 01/27/2021 1055**

**EPA 537.1 - EPA Method 537.1**

01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0026	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0076	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	13C2-PFDA	106	%		1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	13C2-PFHxA	102	%		1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	102	%		1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	102	%		1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	101	%		1

**IX-4M-20210127 (202101270705)**

**Sampled on 01/27/2021 1058**

**EPA 537.1 - EPA Method 537.1**

01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0038	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1

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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0020	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0033	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	13C2-PFDA	108	%		1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	13C2-PFHxA	105	%		1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	103	%		1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	101	%		1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	d5-NEFOSAA	99	%		1

**LH-INF-20210127 (202101270710)**

**Sampled on 01/27/2021 1101**

**EPA 200.8 - ICPMS Metals**

01/28/21	02/03/21 19:57	1302892	1303730	(EPA 200.8)	Arsenic Total ICAP/MS	2.8	ug/L	1.0	1
01/28/21	01/30/21 03:42	1302892	1303402	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
01/28/21	01/30/21 03:42	1302892	1303402	(EPA 200.8)	Uranium ICAP/MS	5.1	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

01/28/21	01/28/21 20:40	1302892	1303072	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
01/28/21	01/28/21 20:40	1302892	1303072	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
01/28/21	01/28/21 20:40	1302892	1303072	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
01/28/21	01/28/21 20:40	1302892	1303072	(EPA 200.7)	Potassium Total ICAP	4.7	mg/L	1.0	1
01/28/21	01/28/21 20:40	1302892	1303072	(EPA 200.7)	Sodium Total ICAP	70	mg/L	1.0	1

**SM 5310C - Total Organic Carbon**

	01/30/21 02:15		1303339	(SM 5310C)	Total Organic Carbon	1.6	mg/L	0.20	1
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**SM 5310C - Dissolved Organic Carbon**

01/28/21	01/29/21 12:58	1303048	1303125	(SM 5310C)	Dissolved Organic Carbon	0.64	mg/L	0.20	1
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**EPA 200.8 - Uranium by ICPMS as pCi/L**

	02/01/21 17:14			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.4 (c)	pCi/L	0.70	1
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**SM 2340B - Total Hardness as CaCO3 by ICP**

	01/28/21 21:23			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
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**EPA 218.6 - Hexavalent chromium(Dissolved)**

	01/30/21 17:49		1303463	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.80	ug/L	0.020	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

	01/28/21 03:24		1302710	(EPA 300.0)	Nitrate as Nitrogen by IC	2.9	mg/L	0.50	5
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 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	01/28/21 03:24		1302710	(EPA 300.0)	Nitrate as NO3 (calc)	13	mg/L	2.2	5
	01/28/21 03:24		1302710	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	01/28/21 03:24		1302710	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.9	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	01/28/21 03:24		1302704	(EPA 300.0)	Chloride	110	mg/L	2.5	5
	01/28/21 03:24		1302704	(EPA 300.0)	Sulfate	170	mg/L	2.5	5
<b>EPA 314.0 - Perchlorate</b>									
	02/03/21 18:11	(1)	1304461	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0062	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0028	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	13C2-PFDA	113	%		1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	13C2-PFHxA	105	%		1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	102	%		1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	103	%		1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	d5-NetFOSAA	99	%		1

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 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	02/02/21 10:33			(EPA 1664)	Oil and Grease by 1664(subbed)	2.52	mg/L	0.971	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Chloroform (Trichloromethane)	0.77	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Dichloromethane	ND (LM)	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Total THM	0.77	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,2-Dichloroethane-d4	106	%		1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	4-Bromofluorobenzene	100	%		1

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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Toluene-d8	94	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	01/30/21 00:36		1303355	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
02/01/21	02/02/21 01:43	1303653	1303724	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	640	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	02/03/21 00:15		1304063	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<b><u>IX-5-20210127 (202101270711)</u></b>					<b>Sampled on 01/27/2021 1213</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0054	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0026	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	13C2-PFDA	105	%		1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	13C2-PFHxA	103	%		1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	101	%		1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	103	%		1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	96	%		1

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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>IX-6-20210127 (202101270712)</b>					<b>Sampled on 01/27/2021 1216</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0034	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0025	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	13C2-PFDA	105	%		1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	13C2-PFHxA	101	%		1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	99	%		1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	101	%		1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	99	%		1

<b>IX-7-20210127 (202101270713)</b>					<b>Sampled on 01/27/2021 1219</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0065	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	13C2-PFDA	99	%		1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	13C2-PFHxA	94	%		1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	13C3-HFPO-DA	93	%		1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	13C4-PFOS- IS#2	116	%		1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	d3-NMeFOSAA	106	%		1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	d5-NEtFOSAA	111	%		1

**IX-8-20210127 (202101270714)**

**Sampled on 01/27/2021 1222**

**EPA 537.1 - EPA Method 537.1**

01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0028	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	13C2-PFDA	105	%		1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	13C2-PFHxA	109	%		1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	13C2-PFOA- IS#1	127	%		1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	13C3-HFPO-DA	106	%		1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	13C4-PFOS- IS#2	120	%		1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	d3-NMeFOSAA	109	%		1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	d5-NEtFOSAA	124	%		1

**GAC-5-20210127 (202101270715)**

Sampled on 01/27/2021 1225

**EPA 537.1 - EPA Method 537.1**

01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0094	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0030	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0028	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0069	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0094	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	13C2-PFDA	117	%		1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	13C2-PFHxA	110	%		1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	13C2-PFOA- IS#1	127	%		1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	13C3-HFPO-DA	98	%		1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	13C4-PFOS- IS#2	117	%		1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	d3-NMeFOSAA	108	%		1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	d5-NEtFOSAA	120	%		1

**GAC-6-20210127 (202101270716)**

Sampled on 01/27/2021 1228

**EPA 537.1 - EPA Method 537.1**

01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0050	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0027	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0078	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0070	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	13C2-PFDA	95	%		1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	13C2-PFHxA	102	%		1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	13C3-HFPO-DA	99	%		1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	d3-NMeFOSAA	106	%		1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**GAC-7-20210127 (202101270717)**

Sampled on 01/27/2021 1231

**EPA 537.1 - EPA Method 537.1**

01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0039	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0045	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0072	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0074	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	13C2-PFDA	106	%		1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	13C2-PFHxA	104	%		1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	13C3-HFPO-DA	98	%		1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	13C4-PFOS- IS#2	117	%		1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	d3-NMeFOSAA	105	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	d5-NEtFOSAA	110	%		1
<b>GAC-8-20210127 (202101270718)</b>						<b>Sampled on 01/27/2021 1234</b>			
<b>EPA 537.1 - EPA Method 537.1</b>									
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0074	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0056	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0025	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0044	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	13C2-PFDA	104	%		1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	13C2-PFHxA	108	%		1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	13C3-HFPO-DA	101	%		1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	13C4-PFOS- IS#2	116	%		1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	d3-NMeFOSAA	106	%		1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	d5-NEtFOSAA	113	%		1

**MB-INF-20210127 (202101270720)**

**Sampled on 01/27/2021 1301**

**EPA 200.8 - ICPMS Metals**

01/28/21	02/03/21 20:00	1302892	1303730	(EPA 200.8)	Arsenic Total ICAP/MS	1.3	ug/L	1.0	1
01/28/21	01/30/21 03:45	1302892	1303402	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
01/28/21	01/30/21 03:45	1302892	1303402	(EPA 200.8)	Uranium ICAP/MS	1.8	ug/L	1.0	1

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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 200.7 - ICP Metals</b>									
01/28/21	01/28/21 20:41	1302892	1303072	(EPA 200.7)	Calcium Total ICAP	63	mg/L	1.0	1
01/28/21	01/28/21 20:41	1302892	1303072	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
01/28/21	01/28/21 20:41	1302892	1303072	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	0.10	1
01/28/21	01/28/21 20:41	1302892	1303072	(EPA 200.7)	Potassium Total ICAP	3.8	mg/L	1.0	1
01/28/21	01/28/21 20:41	1302892	1303072	(EPA 200.7)	Sodium Total ICAP	52	mg/L	1.0	1
<b>SM 5310C - Total Organic Carbon</b>									
	01/30/21 02:33		1303339	(SM 5310C)	Total Organic Carbon	1.3	mg/L	0.20	1
<b>SM 5310C - Dissolved Organic Carbon</b>									
01/28/21	01/29/21 13:20	1303048	1303125	(SM 5310C)	Dissolved Organic Carbon	0.74	mg/L	0.20	1
<b>EPA 200.8 - Uranium by ICPMS as pCi/L</b>									
	02/01/21 17:14			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.2 (c)	pCi/L	0.70	1
<b>SM 2340B - Total Hardness as CaCO3 by ICP</b>									
	01/28/21 21:23			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	210 (c)	mg/L	3.0	1
<b>EPA 218.6 - Hexavalent chromium(Dissolved)</b>									
	02/01/21 11:54		1303644	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.47	ug/L	0.020	1
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>									
	01/28/21 04:03		1302710	(EPA 300.0)	Nitrate as Nitrogen by IC	2.5	mg/L	0.50	5
	01/28/21 04:03		1302710	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
	01/28/21 04:03		1302710	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	01/28/21 04:03		1302710	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.5	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	01/28/21 04:03		1302704	(EPA 300.0)	Chloride	50	mg/L	2.5	5
	01/28/21 04:03		1302704	(EPA 300.0)	Sulfate	74	mg/L	2.5	5
<b>EPA 314.0 - Perchlorate</b>									
	02/03/21 18:36	(1)	1304461	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0090	ug/L	0.0020	1

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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0020	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0038	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0038	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.042	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	13C2-PFDA	102	%		1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	13C2-PFHxA	100	%		1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	13C3-HFPO-DA	100	%		1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	13C4-PFOS- IS#2	117	%		1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	d3-NMeFOSAA	113	%		1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	d5-NEtFOSAA	106	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	02/02/21 10:33			(EPA 1664)	Oil and Grease by 1664(subbed)	2.33	mg/L	0.973	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1

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 Lakewood, CA 90712

Samples Received on:  
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Dichloromethane	ND (LM)	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1

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02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,2-Dichloroethane-d4	105	%		1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	4-Bromofluorobenzene	96	%		1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Toluene-d8	94	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	01/30/21 00:28		1303355	(SM 2320B)	Alkalinity in CaCO3 units	160	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
02/01/21	02/02/21 01:44	1303653	1303724	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	390	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	02/03/21 00:18		1304063	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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**Report:** 915470  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1302704**

202101270710 LH-INF-20210127  
 202101270720 MB-INF-20210127

**Analysis Date: 01/28/2021**

Analyzed by: HL7J  
 Analyzed by: HL7J

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1302710**

202101270710 LH-INF-20210127  
 202101270720 MB-INF-20210127

**Analysis Date: 01/28/2021**

Analyzed by: HL7J  
 Analyzed by: HL7J

**ICP Metals**

**Prep Batch: 1302892 Analytical Batch: 1303072**

202101270710 LH-INF-20210127  
 202101270720 MB-INF-20210127

**Analysis Date: 01/28/2021**

Analyzed by: Y7TT  
 Analyzed by: Y7TT

**Dissolved Organic Carbon**

**Prep Batch: 1303048 Analytical Batch: 1303125**

202101270710 LH-INF-20210127  
 202101270720 MB-INF-20210127

**Analysis Date: 01/29/2021**

Analyzed by: ZB2Z  
 Analyzed by: ZB2Z

**Total Organic Carbon**

**Analytical Batch: 1303339**

202101270710 LH-INF-20210127  
 202101270720 MB-INF-20210127

**Analysis Date: 01/30/2021**

Analyzed by: ZB2Z  
 Analyzed by: ZB2Z

**Alkalinity in CaCO3 units**

**Analytical Batch: 1303355**

202101270710 LH-INF-20210127  
 202101270720 MB-INF-20210127

**Analysis Date: 01/30/2021**

Analyzed by: ZS6I  
 Analyzed by: ZS6I

**ICPMS Metals**

**Prep Batch: 1302892 Analytical Batch: 1303402**

202101270710 LH-INF-20210127  
 202101270720 MB-INF-20210127

**Analysis Date: 01/30/2021**

Analyzed by: AZS  
 Analyzed by: AZS

**Hexavalent chromium(Dissolved)**

**Analytical Batch: 1303463**

202101270710 LH-INF-20210127

**Analysis Date: 01/30/2021**

Analyzed by: TLH

**EPA Method 537.1**

**Prep Batch: 1302979 Analytical Batch: 1303604**

202101270713 IX-7-20210127  
 202101270714 IX-8-20210127  
 202101270715 GAC-5-20210127  
 202101270716 GAC-6-20210127  
 202101270717 GAC-7-20210127  
 202101270718 GAC-8-20210127  
 202101270720 MB-INF-20210127

**Analysis Date: 01/29/2021**

Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ  
 Analyzed by: SZZ

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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

**EPA Method 537.1**

**Prep Batch: 1302976 Analytical Batch: 1303616**

**Analysis Date: 01/29/2021**

202101270689	GAC-1-20210127	Analyzed by: KAM
202101270690	GAC-2-20210127	Analyzed by: KAM
202101270691	GAC-3-20210127	Analyzed by: KAM
202101270692	GAC-4-20210127	Analyzed by: KAM
202101270694	IX-1-20210127	Analyzed by: KAM
202101270695	IX-2-20210127	Analyzed by: KAM
202101270696	IX-3-20210127	Analyzed by: KAM
202101270697	IX-4-20210127	Analyzed by: KAM
202101270698	GAC-1M-20210127	Analyzed by: KAM
202101270699	GAC-2M-20210127	Analyzed by: KAM
202101270700	GAC-3M-20210127	Analyzed by: KAM
202101270701	GAC-4M-20210127	Analyzed by: KAM
202101270702	IX-1M-20210127	Analyzed by: KAM
202101270703	IX-2M-20210127	Analyzed by: KAM
202101270704	IX-3M-20210127	Analyzed by: KAM
202101270705	IX-4M-20210127	Analyzed by: KAM
202101270710	LH-INF-20210127	Analyzed by: KAM
202101270711	IX-5-20210127	Analyzed by: KAM
202101270712	IX-6-20210127	Analyzed by: KAM

**Hexavalent chromium(Dissolved)**

**Analytical Batch: 1303644**

**Analysis Date: 02/01/2021**

202101270720	MB-INF-20210127	Analyzed by: TLH
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**Total Dissolved Solids (TDS)**

**Prep Batch: 1303653 Analytical Batch: 1303724**

**Analysis Date: 02/02/2021**

202101270710	LH-INF-20210127	Analyzed by: TJ52
202101270720	MB-INF-20210127	Analyzed by: TJ52

**ICPMS Metals**

**Prep Batch: 1302892 Analytical Batch: 1303730**

**Analysis Date: 02/03/2021**

202101270710	LH-INF-20210127	Analyzed by: AZS
202101270720	MB-INF-20210127	Analyzed by: AZS

**Total Suspended Solids (TSS)**

**Analytical Batch: 1304063**

**Analysis Date: 02/03/2021**

202101270710	LH-INF-20210127	Analyzed by: TJ52
202101270720	MB-INF-20210127	Analyzed by: TJ52

**Perchlorate**

**Analytical Batch: 1304461**

**Analysis Date: 02/03/2021**

202101270710	LH-INF-20210127	Analyzed by: H5VG
202101270720	MB-INF-20210127	Analyzed by: H5VG

**Volatile Organics by GCMS**

**Prep Batch: 1305651 Analytical Batch: 1305666**

**Analysis Date: 02/08/2021**

202101270710	LH-INF-20210127	Analyzed by: FX5E
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**Laboratory QC Summary**

**Report:** 915470  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District

202101270720

MB-INF-20210127

Analyzed by: FX5E

Tel: (626) 386-1100  
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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1302704</b>					<b>Analysis Date: 01/28/2021</b>				
LCS1	Chloride		25	26.0	mg/L	104	(90-110)		
LCS2	Chloride		25	26.1	mg/L	104	(90-110)	20	0.38
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.454	mg/L	91	(50-150)		
MS_202101270710	Chloride	110	65	173	mg/L	106	(80-120)		
MSD_202101270710	Chloride	110	65	173	mg/L	106	(80-120)	20	0.080
LCS1	Sulfate		50	51.3	mg/L	103	(90-110)		
LCS2	Sulfate		50	51.6	mg/L	103	(90-110)	20	0.58
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.986	mg/L	99	(50-150)		
MRLLW	Sulfate		0.25	0.228	mg/L	91	(50-150)		
MS_202101270710	Sulfate	170	125	301	mg/L	107	(80-120)		
MSD_202101270710	Sulfate	170	125	301	mg/L	107	(80-120)	20	0.060
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1302710</b>					<b>Analysis Date: 01/28/2021</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.48	mg/L	99	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.48	mg/L	99	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0479	mg/L	96	(50-150)		
MS_202101270710	Nitrate as Nitrogen by IC	2.9	6.5	9.41	mg/L	105	(80-120)		
MSD_202101270710	Nitrate as Nitrogen by IC	2.9	6.5	9.42	mg/L	105	(80-120)	20	0.078
LCS1	Nitrite Nitrogen by IC		1	0.999	mg/L	100	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.00	mg/L	100	(90-110)	20	0.10
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0503	mg/L	101	(50-150)		
MS_202101270710	Nitrite Nitrogen by IC	ND	2.5	2.50	mg/L	100	(80-120)		
MSD_202101270710	Nitrite Nitrogen by IC	ND	2.5	2.52	mg/L	101	(80-120)	20	0.76
<b>ICP Metals by EPA 200.7</b>									
<b>Analytical Batch: 1303072</b>					<b>Analysis Date: 01/28/2021</b>				
LCS1	Calcium Total ICAP		50	54.2	mg/L	108	(85-115)		
LCS2	Calcium Total ICAP		50	53.7	mg/L	107	(85-115)	20	0.93
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	1.02	mg/L	102	(50-150)		
MS_202101270418	Calcium Total ICAP	8.2	50	59.8	mg/L	103	(70-130)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202101270423	Calcium Total ICAP	28	50	78.3	mg/L	101	(70-130)		
MSD_202101270418	Calcium Total ICAP	8.2	50	60.1	mg/L	104	(70-130)	20	0.49
MSD2_202101270423	Calcium Total ICAP	28	50	78.2	mg/L	101	(70-130)	20	0.18
LCS1	Iron Total ICAP		5	5.38	mg/L	108	(85-115)		
LCS2	Iron Total ICAP		5	5.36	mg/L	107	(85-115)	20	0.56
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0210	mg/L	105	(50-150)		
MS_202101270418	Iron Total ICAP	ND	5	5.20	mg/L	104	(70-130)		
MS2_202101270423	Iron Total ICAP	ND	5	5.24	mg/L	105	(70-130)		
MSD_202101270418	Iron Total ICAP	ND	5	5.24	mg/L	105	(70-130)	20	0.65
MSD2_202101270423	Iron Total ICAP	ND	5	5.24	mg/L	105	(70-130)	20	0.037
LCS1	Magnesium Total ICAP		20	21.2	mg/L	106	(85-115)		
LCS2	Magnesium Total ICAP		20	21.0	mg/L	105	(85-115)	20	0.47
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0976	mg/L	98	(50-150)		
MS_202101270418	Magnesium Total ICAP	1.6	20	22.2	mg/L	103	(70-130)		
MS2_202101270423	Magnesium Total ICAP	23	20	42.8	mg/L	100	(70-130)		
MSD_202101270418	Magnesium Total ICAP	1.6	20	22.4	mg/L	104	(70-130)	20	0.71
MSD2_202101270423	Magnesium Total ICAP	23	20	42.7	mg/L	99	(70-130)	20	0.25
LCS1	Potassium Total ICAP		20	21.2	mg/L	106	(85-115)		
LCS2	Potassium Total ICAP		20	21.0	mg/L	105	(85-115)	20	0.95
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.620	mg/L	62	(50-150)		
MS_202101270418	Potassium Total ICAP	1.6	20	22.8	mg/L	106	(70-130)		
MS2_202101270423	Potassium Total ICAP	2.4	20	24.5	mg/L	111	(70-130)		
MSD_202101270418	Potassium Total ICAP	1.6	20	23.0	mg/L	107	(70-130)	20	1
MSD2_202101270423	Potassium Total ICAP	2.4	20	24.5	mg/L	110	(70-130)	20	0.18
LCS1	Sodium Total ICAP		50	53.1	mg/L	106	(85-115)		
LCS2	Sodium Total ICAP		50	52.8	mg/L	106	(85-115)	20	0.57
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	1.20	mg/L	120	(50-150)		
MS_202101270418	Sodium Total ICAP	3.3	50	53.5	mg/L	100	(70-130)		
MS2_202101270423	Sodium Total ICAP	40	50	88.4	mg/L	96	(70-130)		
MSD_202101270418	Sodium Total ICAP	3.3	50	54.1	mg/L	101	(70-130)	20	1.1
MSD2_202101270423	Sodium Total ICAP	40	50	87.6	mg/L	95	(70-130)	20	0.91

Dissolved Organic Carbon by SM 5310C

Analytical Batch: 1303125

Analysis Date: 01/29/2021

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Dissolved Organic Carbon		5	5.32	mg/L	106	(90-110)		
LCS2	Dissolved Organic Carbon		5	5.36	mg/L	107	(90-110)	20	0.75
MBLK	Dissolved Organic Carbon			<0.10	mg/L				
MRL_CHK	Dissolved Organic Carbon		0.2	0.218	mg/L	109	(50-150)		
MS_202102010043	Dissolved Organic Carbon	3.7	4	7.90	mg/L	106	(80-120)		
MSD_202102010043	Dissolved Organic Carbon	3.7	4	7.90	mg/L	106	(80-120)	20	0.0

**Total Organic Carbon by SM 5310C**

Analytical Batch: 1303339

Analysis Date: 01/29/2021

LCS1	Total Organic Carbon		5	5.15	mg/L	103	(90-110)		
LCS2	Total Organic Carbon		5	5.15	mg/L	103	(90-110)	20	0.0
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.273	mg/L	137	(50-150)		
MS_202101280121	Total Organic Carbon	0.28	4	4.37	mg/L	102	(80-120)		
MS2_202101280141	Total Organic Carbon	0.79	2	2.88	mg/L	105	(80-120)		
MSD_202101280121	Total Organic Carbon	0.28	4	4.46	mg/L	105	(80-120)	20	2.1
MSD2_202101280141	Total Organic Carbon	0.79	2	2.91	mg/L	106	(80-120)	20	0.90

**Alkalinity in CaCO3 units by SM 2320B**

Analytical Batch: 1303355

Analysis Date: 01/29/2021

LCS1	Alkalinity in CaCO3 units		100	98.0	mg/L	98	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.6	mg/L	99	(90-110)	20	0.61
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.17	mg/L	109	(50-150)		
MS_202102020854	Alkalinity in CaCO3 units	95	100	189	mg/L	94	(80-120)		
MS_202101090058	Alkalinity in CaCO3 units	4.4	100	112	mg/L	108	(80-120)		
MSD_202102020854	Alkalinity in CaCO3 units	95	100	165	mg/L	<u>70</u>	(80-120)	20	14
MSD_202101090058	Alkalinity in CaCO3 units	4.4	100	112	mg/L	108	(80-120)	20	0.17

**ICPMS Metals by EPA 200.8**

Analytical Batch: 1303402

Analysis Date: 01/30/2021

LCS1	Arsenic Total ICAP/MS		50	51.0	ug/L	102	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	49.4	ug/L	99	(85-115)	20	3.2
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.842	ug/L	84	(50-150)		
MS_202101260081	Arsenic Total ICAP/MS	1.4	50	53.5	ug/L	104	(70-130)		
MS2_202012220205	Arsenic Total ICAP/MS	ND	50	57.1	ug/L	114	(70-130)		
MSD_202101260081	Arsenic Total ICAP/MS	1.4	50	58.8	ug/L	115	(70-130)	20	9.4
MSD2_202012220205	Arsenic Total ICAP/MS	ND	50	58.2	ug/L	116	(70-130)	20	1.9

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Manganese Total ICAP/MS		100	105	ug/L	105	(85-115)		
LCS2	Manganese Total ICAP/MS		100	106	ug/L	106	(85-115)	20	0.95
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.05	ug/L	102	(50-150)		
MS_202101260081	Manganese Total ICAP/MS	6.6	100	110	ug/L	103	(70-130)		
MS2_202012220205	Manganese Total ICAP/MS	ND	100	109	ug/L	109	(70-130)		
MSD_202101260081	Manganese Total ICAP/MS	6.6	100	119	ug/L	113	(70-130)	20	7.9
MSD2_202012220205	Manganese Total ICAP/MS	ND	100	114	ug/L	113	(70-130)	20	4.2
LCS1	Uranium ICAP/MS		50	49.7	ug/L	100	(85-115)		
LCS2	Uranium ICAP/MS		50	48.3	ug/L	97	(85-115)	20	2.9
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.984	ug/L	98	(50-150)		
MS_202101260081	Uranium ICAP/MS	3.3	50	57.9	ug/L	109	(70-130)		
MS2_202012220205	Uranium ICAP/MS	6.1	50	58.0	ug/L	104	(70-130)		
MSD_202101260081	Uranium ICAP/MS	3.3	50	56.6	ug/L	107	(70-130)	20	2.2
MSD2_202012220205	Uranium ICAP/MS	6.1	50	60.8	ug/L	109	(70-130)	20	4.7

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1303463

Analysis Date: 01/30/2021

LCS1	Hexavalent chromium(Dissolved)		2	2.00	ug/L	100	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.97	ug/L	99	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0198	ug/L	99	(50-150)		
MS_202101280098	Hexavalent chromium(Dissolved)	1.0	2	3.18	ug/L	108	(90-110)		
MS_202101300112	Hexavalent chromium(Dissolved)	0.028	2	2.14	ug/L	105	(90-110)		
MSD_202101280098	Hexavalent chromium(Dissolved)	1.0	2	3.18	ug/L	108	(90-110)	20	0.082
MSD_202101300112	Hexavalent chromium(Dissolved)	0.028	2	2.13	ug/L	105	(90-110)	20	0.26

EPA Method 537.1 by EPA 537.1

Prep Batch: 1302979 Analytical Batch: 1303604

Analysis Date: 01/29/2021

DUP_202101280099	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0416	ug/L	88	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0414	ug/L	88	(70-130)	30	0.48
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00154	ug/L	82	(50-150)		
MS1_202101270713	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0197	ug/L	84	(70-130)		
DUP_202101280099	13C2-PFDA (S)			102	%	102	(70-130)		
LCS3	13C2-PFDA (S)		100	99.9	%	100	(70-130)		
LCS4	13C2-PFDA (S)		100	102	%	102	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFDA (S)			104	%	105	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	97.2	%	97	(70-130)		
MS1_202101270713	13C2-PFDA (S)		100	91.6	%	92	(70-130)		
DUP_202101280099	13C2-PFHxA (S)			107	%	107	(70-130)		
LCS3	13C2-PFHxA (S)		100	106	%	106	(70-130)		
LCS4	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MBLK	13C2-PFHxA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MS1_202101270713	13C2-PFHxA (S)		100	87.8	%	88	(70-130)		
DUP_202101280099	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			110	%	110	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	113	%	113	(50-150)		
MS1_202101270713	13C2-PFOA- IS#1 (I)		100	127	%	127	(50-150)		
DUP_202101280099	13C3-HFPO-DA (S)			100	%	100	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
MBLK	13C3-HFPO-DA (S)			99.8	%	100	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	99.7	%	100	(70-130)		
MS1_202101270713	13C3-HFPO-DA (S)		100	85.9	%	86	(70-130)		
DUP_202101280099	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			114	%	114	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	110	%	111	(50-150)		
MS1_202101270713	13C4-PFOS- IS#2 (I)		100	117	%	117	(50-150)		
DUP_202101280099	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0465	ug/L	96	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0454	ug/L	94	(70-130)	30	2.4
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00188	ug/L	100	(50-150)		
MS1_202101270713	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0210	ug/L	89	(70-130)		
DUP_202101280099	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0451	ug/L	97	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0445	ug/L	96	(70-130)	30	1.3
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00181	ug/L	97	(50-150)		

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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202101270713	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0222	ug/L	95	(70-130)		
DUP_202101280099	d3-NMeFOSAA (I)			106	%	107	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	97.7	%	98	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	96.0	%	96	(50-150)		
MBLK	d3-NMeFOSAA (I)			104	%	104	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MS1_202101270713	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
DUP_202101280099	d5-NEtFOSAA (S)			105	%	105	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MBLK	d5-NEtFOSAA (S)			110	%	110	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MS1_202101270713	d5-NEtFOSAA (S)		100	96.0	%	96	(70-130)		
DUP_202101280099	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0473	ug/L	95	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0460	ug/L	92	(70-130)	30	2.8
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00182	ug/L	91	(50-150)		
MS1_202101270713	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0217	ug/L	87	(70-130)		
DUP_202101280099	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0509	ug/L	102	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0530	ug/L	106	(70-130)	30	4.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00213	ug/L	107	(50-150)		
MS1_202101270713	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0259	ug/L	104	(70-130)		
DUP_202101280099	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0492	ug/L	99	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0495	ug/L	99	(70-130)	30	0.61
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00205	ug/L	102	(50-150)		
MS1_202101270713	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0257	ug/L	103	(70-130)		
DUP_202101280099	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0433	ug/L	98	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0435	ug/L	98	(70-130)	30	0.46
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00182	ug/L	103	(50-150)		
MS1_202101270713	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0227	ug/L	101	(70-130)		
DUP_202101280099	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		

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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0458	ug/L	92	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0460	ug/L	92	(70-130)	30	0.44
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00181	ug/L	91	(50-150)		
MS1_202101270713	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0238	ug/L	95	(70-130)		
DUP_202101280099	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0451	ug/L	90	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0459	ug/L	92	(70-130)	30	1.8
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00177	ug/L	89	(50-150)		
MS1_202101270713	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0208	ug/L	83	(70-130)		
DUP_202101280099	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0492	ug/L	99	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0488	ug/L	98	(70-130)	30	1.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00213	ug/L	107	(50-150)		
MS1_202101270713	Perfluoroheptanoic acid (PFHpA)	0.0040	0.025	0.0260	ug/L	88	(70-130)		
DUP_202101280099	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0449	ug/L	99	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0449	ug/L	99	(70-130)	30	0.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00192	ug/L	106	(50-150)		
MS1_202101270713	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0229	ug/L	101	(70-130)		
DUP_202101280099	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0506	ug/L	101	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0485	ug/L	97	(70-130)	30	4.2
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00212	ug/L	106	(50-150)		
MS1_202101270713	Perfluorohexanoic acid (PFHxA)	0.0063	0.025	0.0285	ug/L	89	(70-130)		
DUP_202101280099	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0508	ug/L	102	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0490	ug/L	98	(70-130)	30	3.6
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00213	ug/L	107	(50-150)		
MS1_202101270713	Perfluorononanoic acid (PFNA)	ND	0.025	0.0240	ug/L	95	(70-130)		
DUP_202101280099	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0458	ug/L	99	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0456	ug/L	99	(70-130)	30	0.44

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00213	ug/L	115	(50-150)		
MS1_202101270713	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0236	ug/L	102	(70-130)		
DUP_202101280099	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0506	ug/L	101	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0504	ug/L	101	(70-130)	30	0.40
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00210	ug/L	105	(50-150)		
MS1_202101270713	Perfluorooctanoic acid (PFOA)	0.0065	0.025	0.0324	ug/L	104	(70-130)		
DUP_202101280099	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0462	ug/L	92	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0467	ug/L	94	(70-130)	30	1.1
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00181	ug/L	91	(50-150)		
MS1_202101270713	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0214	ug/L	85	(70-130)		
DUP_202101280099	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0455	ug/L	91	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0444	ug/L	89	(70-130)	30	2.5
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00167	ug/L	84	(50-150)		
MS1_202101270713	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0203	ug/L	81	(70-130)		
DUP_202101280099	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0492	ug/L	98	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0479	ug/L	96	(70-130)	30	2.7
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00190	ug/L	95	(50-150)		
MS1_202101270713	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0227	ug/L	91	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1302976 Analytical Batch: 1303616

Analysis Date: 01/29/2021

DUP_202101270695	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0236	ug/L	100	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0240	ug/L	102	(70-130)	30	1.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00199	ug/L	106	(50-150)		
MS_202101270689	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00190	ug/L	101	(50-150)		
DUP_202101270695	13C2-PFDA (S)			106	%	106	(70-130)		
LCS1	13C2-PFDA (S)		100	108	%	108	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	13C2-PFDA (S)		100	108	%	108	(70-130)		
MBLK	13C2-PFDA (S)			112	%	113	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	107	%	107	(70-130)		
MS_202101270689	13C2-PFDA (S)		100	104	%	104	(70-130)		
DUP_202101270695	13C2-PFHxA (S)			103	%	103	(70-130)		
LCS1	13C2-PFHxA (S)		100	104	%	104	(70-130)		
LCS2	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MBLK	13C2-PFHxA (S)			109	%	109	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MS_202101270689	13C2-PFHxA (S)		100	103	%	103	(70-130)		
DUP_202101270695	13C2-PFOA- IS#1 (I)			102	%	103	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	99.6	%	100	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MS_202101270689	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
DUP_202101270695	13C3-HFPO-DA (S)			102	%	102	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
MBLK	13C3-HFPO-DA (S)			107	%	107	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	99.9	%	100	(70-130)		
MS_202101270689	13C3-HFPO-DA (S)		100	99.5	%	100	(70-130)		
DUP_202101270695	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	97.7	%	98	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	99.4	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			103	%	103	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	99.4	%	99	(50-150)		
MS_202101270689	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
DUP_202101270695	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0243	ug/L	103	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0246	ug/L	104	(70-130)	30	1.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00193	ug/L	102	(50-150)		
MS_202101270689	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00194	ug/L	103	(50-150)		
DUP_202101270695	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0252	ug/L	108	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0254	ug/L	109	(70-130)	30	0.79
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00202	ug/L	108	(50-150)		
MS_202101270689	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00195	ug/L	105	(50-150)		
DUP_202101270695	d3-NMeFOSAA (I)			104	%	104	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MBLK	d3-NMeFOSAA (I)			99.1	%	99	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MS_202101270689	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
DUP_202101270695	d5-NEtFOSAA (S)			100	%	100	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	98.6	%	99	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	97.5	%	97	(70-130)		
MBLK	d5-NEtFOSAA (S)			105	%	105	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
MS_202101270689	d5-NEtFOSAA (S)		100	98.1	%	98	(70-130)		
DUP_202101270695	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0249	ug/L	100	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0253	ug/L	101	(70-130)	30	1.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00204	ug/L	102	(50-150)		
MS_202101270689	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00194	ug/L	97	(50-150)		
DUP_202101270695	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0250	ug/L	100	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0253	ug/L	101	(70-130)	30	1.2
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00199	ug/L	100	(50-150)		
MS_202101270689	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00201	ug/L	100	(50-150)		
DUP_202101270695	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0254	ug/L	102	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0259	ug/L	104	(70-130)	30	2.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00204	ug/L	102	(50-150)		
MS_202101270689	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00204	ug/L	102	(50-150)		
DUP_202101270695	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0226	ug/L	102	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0229	ug/L	103	(70-130)	30	1.3
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00191	ug/L	108	(50-150)		
MS_202101270689	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00240	ug/L	99	(50-150)		

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 915470  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202101270695	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0269	ug/L	108	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0271	ug/L	108	(70-130)	30	0.74
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00216	ug/L	108	(50-150)		
MS_202101270689	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00212	ug/L	101	(50-150)		
DUP_202101270695	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0257	ug/L	103	(70-130)	30	0.0
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00209	ug/L	104	(50-150)		
MS_202101270689	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00201	ug/L	98	(50-150)		
DUP_202101270695	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0265	ug/L	106	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0263	ug/L	105	(70-130)	30	0.76
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00211	ug/L	106	(50-150)		
MS_202101270689	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00217	ug/L	102	(50-150)		
DUP_202101270695	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0245	ug/L	107	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0247	ug/L	108	(70-130)	30	0.81
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00193	ug/L	106	(50-150)		
MS_202101270689	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00194	ug/L	106	(50-150)		
DUP_202101270695	Perfluorohexanoic acid (PFHxA)	0.0038		0.00392	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0255	ug/L	102	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0260	ug/L	104	(70-130)	30	1.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00205	ug/L	102	(50-150)		
MS_202101270689	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00286	ug/L	94	(50-150)		
DUP_202101270695	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0265	ug/L	106	(70-130)	30	1.9
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00213	ug/L	107	(50-150)		
MS_202101270689	Perfluorononanoic acid (PFNA)	ND	0.002	0.00212	ug/L	103	(50-150)		
DUP_202101270695	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0245	ug/L	106	(70-130)		

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0248	ug/L	107	(70-130)	30	1.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00213	ug/L	115	(50-150)		
MS_202101270689	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00209	ug/L	104	(50-150)		
DUP_202101270695	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0258	ug/L	103	(70-130)	30	0.77
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202101270689	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00237	ug/L	102	(50-150)		
DUP_202101270695	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0274	ug/L	110	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0279	ug/L	111	(70-130)	30	1.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00280	ug/L	140	(50-150)		
MS_202101270689	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00269	ug/L	105	(50-150)		
DUP_202101270695	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0261	ug/L	104	(70-130)	30	1.5
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202101270689	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00207	ug/L	104	(50-150)		
DUP_202101270695	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0254	ug/L	101	(70-130)	30	1.6
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00204	ug/L	102	(50-150)		
MS_202101270689	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00200	ug/L	100	(50-150)		

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1303644

Analysis Date: 02/01/2021

LCS1	Hexavalent chromium(Dissolved)		2	1.98	ug/L	99	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.98	ug/L	99	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0165	ug/L	83	(50-150)		
MS_202102010133	Hexavalent chromium(Dissolved)	0.031	2	2.12	ug/L	104	(90-110)		
MSD_202102010133	Hexavalent chromium(Dissolved)	0.031	2	2.12	ug/L	104	(90-110)	20	0.057

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Total Dissolved Solids (TDS) by E160.1/SM2540C</b>									
<b>Analytical Batch: 1303724</b>					<b>Analysis Date: 02/02/2021</b>				
DUP_202101270292	Total Dissolved Solid (TDS)	250		236	mg/L		(0-10)	10	4.1
DUP_202101270387	Total Dissolved Solid (TDS)	340		342	mg/L		(0-10)	10	0.0
LCS1	Total Dissolved Solid (TDS)		175	180	mg/L	103	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	704	mg/L	101	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	12.0	mg/L	120	(50-150)		
<b>ICPMS Metals by EPA 200.8</b>									
<b>Analytical Batch: 1303730</b>					<b>Analysis Date: 02/03/2021</b>				
LCS1	Arsenic Total ICAP/MS		50	47.9	ug/L	96	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	48.0	ug/L	96	(85-115)	20	0.21
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.665	ug/L	67	(50-150)		
MS_202101270369	Arsenic Total ICAP/MS	ND	50	44.3	ug/L	89	(70-130)		
MS2_202101280163	Arsenic Total ICAP/MS	2.2	50	50.3	ug/L	96	(70-130)		
MSD_202101270369	Arsenic Total ICAP/MS	ND	50	46.7	ug/L	93	(70-130)	20	5.3
MSD2_202101280163	Arsenic Total ICAP/MS	2.2	50	44.0	ug/L	84	(70-130)	20	13
LCS1	Manganese Total ICAP/MS		100	100	ug/L	101	(85-115)		
LCS2	Manganese Total ICAP/MS		100	100	ug/L	100	(85-115)	20	1
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.04	ug/L	102	(50-150)		
MS_202101270369	Manganese Total ICAP/MS	3.5	100	95.5	ug/L	96	(70-130)		
MS2_202101280163	Manganese Total ICAP/MS	ND	100	97.3	ug/L	96	(70-130)		
MSD_202101270369	Manganese Total ICAP/MS	3.5	100	98.7	ug/L	99	(70-130)	20	3.3
MSD2_202101280163	Manganese Total ICAP/MS	ND	100	84.6	ug/L	83	(70-130)	20	14
LCS1	Uranium ICAP/MS		50	52.6	ug/L	105	(85-115)		
LCS2	Uranium ICAP/MS		50	52.0	ug/L	104	(85-115)	20	1.1
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.954	ug/L	95	(50-150)		
MS_202101270369	Uranium ICAP/MS	ND	50	47.2	ug/L	94	(70-130)		
MS2_202101280163	Uranium ICAP/MS	14	50	71.2	ug/L	114	(70-130)		
MSD_202101270369	Uranium ICAP/MS	ND	50	49.4	ug/L	99	(70-130)	20	4.5
MSD2_202101280163	Uranium ICAP/MS	14	50	59.0	ug/L	89	(70-130)	20	19
<b>Total Suspended Solids (TSS) by SM 2540D</b>									
<b>Analytical Batch: 1304063</b>					<b>Analysis Date: 02/03/2021</b>				

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202012230126	Total Suspended Solids (TSS)	64		64.0	mg/L		(0-10)	10	0.0
DUP_202012230145	Total Suspended Solids (TSS)	270		254	mg/L		(0-10)	10	6.8
LCS1	Total Suspended Solids (TSS)		175	168	mg/L	96	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	172	mg/L	98	(71-107)	20	2.4
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	8.00	mg/L	80	(50-150)		

Perchlorate by EPA 314.0

Analytical Batch: 1304461

Analysis Date: 02/03/2021

LCS1	Perchlorate		25	24.1	ug/L	96	(85-115)		
LCS2	Perchlorate		25	23.5	ug/L	94	(85-115)	15	2.5
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	3.87	ug/L	97	(75-125)		
MS_202101270668	Perchlorate	ND	25	27.0	ug/L	108	(80-120)		
MSD_202101270668	Perchlorate	ND	25	26.8	ug/L	107	(80-120)	15	0.78

Volatile Organics by GCMS by EPA 524.2

Analytical Batch: 1305666

Analysis Date: 02/08/2021

LCS1	1,1,1,2-Tetrachloroethane		5	4.99	ug/L	100	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	4.53	ug/L	91	(70-130)	20	9.7
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.62	ug/L	92	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.32	ug/L	86	(70-130)	20	6.7
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.09	ug/L	102	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	4.56	ug/L	91	(70-130)	20	11
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.94	ug/L	99	(70-130)		
LCS2	1,1,2-Trichloroethane		5	4.80	ug/L	96	(70-130)	20	2.9
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,1-Dichloroethane		5	4.92	ug/L	98	(70-130)		
LCS2	1,1-Dichloroethane		5	4.36	ug/L	87	(70-130)	20	12
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1-Dichloroethylene		5	4.44	ug/L	89	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	1,1-Dichloroethylene		5	4.00	ug/L	80	(70-130)	20	10
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1-Dichloropropene		5	4.84	ug/L	97	(70-130)		
LCS2	1,1-Dichloropropene		5	4.25	ug/L	85	(70-130)	20	13
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.73	ug/L	95	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	4.64	ug/L	93	(70-130)	20	1.9
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.750	ug/L	150	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.25	ug/L	105	(70-130)		
LCS2	1,2,3-Trichloropropane		5	4.62	ug/L	92	(70-130)	20	13
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.610	ug/L	122	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.78	ug/L	96	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	4.70	ug/L	94	(70-130)	20	1.7
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.660	ug/L	132	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.74	ug/L	95	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	4.40	ug/L	88	(70-130)	20	7.4
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,2-Dichloroethane		5	5.41	ug/L	108	(70-130)		
LCS2	1,2-Dichloroethane		5	5.23	ug/L	105	(70-130)	20	3.4
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	104	%	104	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			111	%	111	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	106	%	106	(70-130)		
LCS1	1,2-Dichloropropane		5	4.95	ug/L	99	(70-130)		
LCS2	1,2-Dichloropropane		5	4.84	ug/L	97	(70-130)	20	2.3
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.72	ug/L	94	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.43	ug/L	89	(70-130)	20	6.3

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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,3-Dichloropropane		5	5.21	ug/L	104	(70-130)		
LCS2	1,3-Dichloropropane		5	4.78	ug/L	96	(70-130)	20	8.6
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.550	ug/L	110	(50-150)		
LCS1	2,2-Dichloropropane		5	4.92	ug/L	98	(70-130)		
LCS2	2,2-Dichloropropane		5	4.53	ug/L	91	(70-130)	20	8.3
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.640	ug/L	128	(50-150)		
LCS1	2-Butanone (MEK)		50	55.8	ug/L	112	(70-130)		
LCS2	2-Butanone (MEK)		50	50.3	ug/L	101	(70-130)	20	10
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	4.28	ug/L	86	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	98.0	%	98	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	93.8	%	94	(70-130)		
MBLK	4-Bromofluorobenzene (S)			91.8	%	92	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	105	%	105	(70-130)		
MRL_W	4-Bromofluorobenzene (S)		5	97.6	%	98	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	55.3	ug/L	111	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	49.4	ug/L	99	(70-130)	20	11
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	5.08	ug/L	102	(50-150)		
LCS1	Benzene		5	4.93	ug/L	99	(70-130)		
LCS2	Benzene		5	4.51	ug/L	90	(70-130)	20	8.9
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.560	ug/L	112	(50-150)		
LCS1	Bromobenzene		5	4.91	ug/L	98	(70-130)		
LCS2	Bromobenzene		5	4.38	ug/L	88	(70-130)	20	11
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.570	ug/L	114	(50-150)		
LCS1	Bromochloromethane		5	5.18	ug/L	104	(70-130)		
LCS2	Bromochloromethane		5	4.48	ug/L	90	(70-130)	20	15
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.570	ug/L	114	(50-150)		
LCS1	Bromodichloromethane		5	4.99	ug/L	100	(70-130)		
LCS2	Bromodichloromethane		5	4.68	ug/L	94	(70-130)	20	6.4
MBLK	Bromodichloromethane			<0.5	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 915470  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Bromodichloromethane		0.5	0.560	ug/L	112	(50-150)		
LCS1	Bromoethane		5	4.77	ug/L	95	(70-130)		
LCS2	Bromoethane		5	4.29	ug/L	86	(70-130)	20	11
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	Bromoform		5	4.41	ug/L	88	(70-130)		
LCS2	Bromoform		5	4.19	ug/L	84	(70-130)	20	5.1
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.670	ug/L	134	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.07	ug/L	101	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	4.82	ug/L	96	(70-130)	20	5.1
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.650	ug/L	130	(50-150)		
LCS1	Carbon disulfide		5	4.05	ug/L	81	(70-130)		
LCS2	Carbon disulfide		5	3.60	ug/L	72	(70-130)	20	12
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.570	ug/L	114	(50-150)		
LCS1	Carbon Tetrachloride		5	4.94	ug/L	99	(70-130)		
LCS2	Carbon Tetrachloride		5	4.46	ug/L	89	(70-130)	20	10
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.480	ug/L	96	(50-150)		
LCS1	Chlorobenzene		5	4.92	ug/L	98	(70-130)		
LCS2	Chlorobenzene		5	4.50	ug/L	90	(70-130)	20	8.9
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Chlorodibromomethane		5	5.06	ug/L	101	(70-130)		
LCS2	Chlorodibromomethane		5	4.38	ug/L	88	(70-130)	20	14
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Chloroethane		5	4.50	ug/L	90	(70-130)		
LCS2	Chloroethane		5	3.89	ug/L	78	(70-130)	20	15
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	5.13	ug/L	103	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	4.60	ug/L	92	(70-130)	20	11
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.44	ug/L	89	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Chloromethane(Methyl Chloride)		5	3.89	ug/L	78	(70-130)	20	13
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.390	ug/L	78	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.89	ug/L	98	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.31	ug/L	86	(70-130)	20	13
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.530	ug/L	106	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.56	ug/L	91	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.41	ug/L	88	(70-130)	20	3.3
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.670	ug/L	134	(50-150)		
LCS1	Dibromomethane		5	5.18	ug/L	104	(70-130)		
LCS2	Dibromomethane		5	4.83	ug/L	97	(70-130)	20	7.0
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.560	ug/L	112	(50-150)		
LCS1	Dichlorodifluoromethane		5	4.74	ug/L	95	(70-130)		
LCS2	Dichlorodifluoromethane		5	4.35	ug/L	87	(70-130)	20	8.6
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.440	ug/L	88	(50-150)		
LCS1	Dichloromethane		5	4.93	ug/L	99	(70-130)		
LCS2	Dichloromethane		5	4.60	ug/L	92	(70-130)	20	6.9
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.760	ug/L	<u>152</u>	(50-150)		
LCS1	Di-isopropyl ether		5	5.01	ug/L	100	(70-130)		
LCS2	Di-isopropyl ether		5	4.54	ug/L	91	(70-130)	20	9.8
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.570	ug/L	114	(50-150)		
LCS1	Ethyl benzene		5	4.97	ug/L	99	(70-130)		
LCS2	Ethyl benzene		5	4.55	ug/L	91	(70-130)	20	8.8
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Hexachlorobutadiene		5	4.44	ug/L	89	(70-130)		
LCS2	Hexachlorobutadiene		5	4.58	ug/L	92	(70-130)	20	3.1
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.630	ug/L	126	(50-150)		
LCS1	Isopropylbenzene		5	4.65	ug/L	93	(70-130)		
LCS2	Isopropylbenzene		5	4.34	ug/L	87	(70-130)	20	6.9
MBLK	Isopropylbenzene			<0.5	ug/L				

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Isopropylbenzene		0.5	0.530	ug/L	106	(50-150)		
LCS1	m,p-Xylenes		10	9.68	ug/L	97	(70-130)		
LCS2	m,p-Xylenes		10	8.91	ug/L	89	(70-130)	20	8.3
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.940	ug/L	94	(50-150)		
MRL_LW	m,p-Xylenes		0.5	0.460	ug/L	92	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.77	ug/L	95	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	4.51	ug/L	90	(70-130)	20	5.6
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.560	ug/L	112	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	5.11	ug/L	102	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	4.45	ug/L	89	(70-130)	20	14
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.560	ug/L	112	(50-150)		
LCS1	Naphthalene		5	4.87	ug/L	97	(70-130)		
LCS2	Naphthalene		5	4.89	ug/L	98	(70-130)	20	0.41
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.640	ug/L	128	(50-150)		
LCS1	n-Butylbenzene		5	4.65	ug/L	93	(70-130)		
LCS2	n-Butylbenzene		5	4.34	ug/L	87	(70-130)	20	6.9
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.550	ug/L	110	(50-150)		
LCS1	n-Propylbenzene		5	4.56	ug/L	91	(70-130)		
LCS2	n-Propylbenzene		5	4.22	ug/L	84	(70-130)	20	7.7
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	o-Chlorotoluene		5	4.62	ug/L	92	(70-130)		
LCS2	o-Chlorotoluene		5	4.27	ug/L	85	(70-130)	20	7.9
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.520	ug/L	104	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.78	ug/L	96	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	4.66	ug/L	93	(70-130)	20	2.5
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.540	ug/L	108	(50-150)		
LCS1	o-Xylene		5	5.04	ug/L	101	(70-130)		
LCS2	o-Xylene		5	4.61	ug/L	92	(70-130)	20	8.9
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.490	ug/L	98	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	p-Chlorotoluene		5	4.71	ug/L	94	(70-130)		
LCS2	p-Chlorotoluene		5	4.39	ug/L	88	(70-130)	20	7.0
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.520	ug/L	104	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	4.82	ug/L	96	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	4.53	ug/L	91	(70-130)	20	6.2
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.550	ug/L	110	(50-150)		
LCS1	p-Isopropyltoluene		5	4.64	ug/L	93	(70-130)		
LCS2	p-Isopropyltoluene		5	4.23	ug/L	85	(70-130)	20	9.2
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.510	ug/L	102	(50-150)		
LCS1	sec-Butylbenzene		5	4.60	ug/L	92	(70-130)		
LCS2	sec-Butylbenzene		5	4.21	ug/L	84	(70-130)	20	8.8
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.540	ug/L	108	(50-150)		
LCS1	Styrene		5	4.92	ug/L	98	(70-130)		
LCS2	Styrene		5	4.50	ug/L	90	(70-130)	20	8.9
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.460	ug/L	92	(50-150)		
LCS1	tert-amyl Methyl Ether		5	5.28	ug/L	106	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.78	ug/L	96	(70-130)	20	9.9
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.510	ug/L	102	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	5.10	ug/L	102	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	4.65	ug/L	93	(70-130)	20	9.2
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.530	ug/L	106	(50-150)		
LCS1	tert-Butylbenzene		5	4.03	ug/L	81	(70-130)		
LCS2	tert-Butylbenzene		5	3.71	ug/L	74	(70-130)	20	8.3
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.63	ug/L	93	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.46	ug/L	89	(70-130)	20	3.7
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.540	ug/L	108	(50-150)		
LCS1	Toluene		5	4.91	ug/L	98	(70-130)		
LCS2	Toluene		5	4.66	ug/L	93	(70-130)	20	5.2

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 915470  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Toluene-d8 (S)		5	97.0	%	97	(70-130)		
LCS2	Toluene-d8 (S)		5	100	%	100	(70-130)		
MBLK	Toluene-d8 (S)			96.4	%	96	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	97.2	%	97	(70-130)		
MRLW	Toluene-d8 (S)		5	94.8	%	95	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.55	ug/L	91	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	4.13	ug/L	83	(70-130)	20	9.7
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.530	ug/L	106	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.77	ug/L	95	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.10	ug/L	82	(70-130)	20	15
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.570	ug/L	114	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.71	ug/L	94	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.37	ug/L	87	(70-130)	20	7.5
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.510	ug/L	102	(50-150)		
LCS1	Trichlorofluoromethane		5	4.31	ug/L	86	(70-130)		
LCS2	Trichlorofluoromethane		5	3.91	ug/L	78	(70-130)	20	9.7
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	4.56	ug/L	91	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	4.04	ug/L	81	(70-130)	20	12
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.500	ug/L	100	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.38	ug/L	88	(70-130)		
LCS2	Vinyl chloride (VC)		5	3.92	ug/L	78	(70-130)	20	11
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.390	ug/L	78	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.280	ug/L	112	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

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RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 02/10/2021

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 02/10/2021

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 02/10/2021

, Tel Fax

Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)\*

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required

Approved by

Date of Issue: 02/10/2021

Quant Report - Page 1 of 1

Tel Fax

## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-49609-1  
Client Project/Site: 915470

For:  
Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:  
2/3/2021 4:44:54 PM

Lori Thompson, Project Manager I  
(714)895-5494  
[Lori.Thompson@eurofinset.com](mailto:Lori.Thompson@eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

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*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 915470

Job ID: 570-49609-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 915470

Job ID: 570-49609-1

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**Job ID: 570-49609-1**

---

**Laboratory: Eurofins Calscience LLC**

---

**Narrative**

**Job Narrative**  
**570-49609-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 1/28/2021 12:33 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.5° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-126107. LCS/LCSD were performed to meet QC requirements

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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# Detection Summary

Client: Eurofins Eaton Analytical  
Project/Site: 915470

Job ID: 570-49609-1

## Client Sample ID: 202101270710

## Lab Sample ID: 570-49609-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	2.52		0.971	0.777	mg/L	1		1664A	Total/NA

## Client Sample ID: 202101270720

## Lab Sample ID: 570-49609-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	2.33		0.973	0.778	mg/L	1		1664A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 915470

Job ID: 570-49609-1

## General Chemistry

Client Sample ID: 202101270710

Date Collected: 01/27/21 11:01

Date Received: 01/28/21 12:33

Lab Sample ID: 570-49609-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	2.52		0.971	0.777	mg/L		02/01/21 16:50	02/02/21 10:33	1

Client Sample ID: 202101270720

Date Collected: 01/27/21 13:01

Date Received: 01/28/21 12:33

Lab Sample ID: 570-49609-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	2.33		0.973	0.778	mg/L		02/01/21 16:50	02/02/21 10:33	1

# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 915470

Job ID: 570-49609-1

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 570-126107/1-A**  
**Matrix: Water**  
**Analysis Batch: 126266**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 126107**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		02/01/21 16:50	02/02/21 10:33	1

**Lab Sample ID: LCS 570-126107/2-A**  
**Matrix: Water**  
**Analysis Batch: 126266**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 126107**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	37.20		mg/L		93	78 - 114

**Lab Sample ID: LCSD 570-126107/3-A**  
**Matrix: Water**  
**Analysis Batch: 126266**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 126107**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	37.40		mg/L		93	78 - 114	1	18

# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 915470

Job ID: 570-49609-1

## General Chemistry

### Prep Batch: 126107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-49609-1	202101270710	Total/NA	Water	1664A	
570-49609-2	202101270720	Total/NA	Water	1664A	
MB 570-126107/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-126107/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-126107/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

### Analysis Batch: 126266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-49609-1	202101270710	Total/NA	Water	1664A	126107
570-49609-2	202101270720	Total/NA	Water	1664A	126107
MB 570-126107/1-A	Method Blank	Total/NA	Water	1664A	126107
LCS 570-126107/2-A	Lab Control Sample	Total/NA	Water	1664A	126107
LCSD 570-126107/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	126107

# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 915470

Job ID: 570-49609-1

**Client Sample ID: 202101270710**

**Lab Sample ID: 570-49609-1**

**Date Collected: 01/27/21 11:01**

**Matrix: Water**

**Date Received: 01/28/21 12:33**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1030 mL	1000 mL	126107	02/01/21 16:50	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			126266	02/02/21 10:33	F7UI	ECL 1

Instrument ID: NOEQUIP

**Client Sample ID: 202101270720**

**Lab Sample ID: 570-49609-2**

**Date Collected: 01/27/21 13:01**

**Matrix: Water**

**Date Received: 01/28/21 12:33**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1028 mL	1000 mL	126107	02/01/21 16:50	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			126266	02/02/21 10:33	F7UI	ECL 1

Instrument ID: NOEQUIP

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 915470

Job ID: 570-49609-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-30-21
California	SCAQMD LAP	17LA0919	11-30-21
California	State	2944	09-30-21
Guam	State	20-003R	10-31-20 *
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-30-22
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-21

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.



# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 915470

Job ID: 570-49609-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

**Protocol References:**

1664A = EPA-821-98-002

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
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- 10
- 11
- 12
- 13
- 14

# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 915470

Job ID: 570-49609-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-49609-1	202101270710	Water	01/27/21 11:01	01/28/21 12:33	
570-49609-2	202101270720	Water	01/27/21 13:01	01/28/21 12:33	

- 1
- 2
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- 11
- 12
- 13
- 14

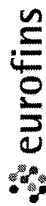
49609

### Submittal Form

Date: 1/28/2021

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!  
Report & Invoice must have the Folder # 915470 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report.  
Results must have Complete data & QC with Approval Signature.



Eaton Analytical

#### Ship To:

Eurofins CalScience  
7440 Lincoln Way

Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax 714-894-7501

Folder #: 915470 Report Due: 02/10/2021

Reports: Jackie Contreras Sub-Contracting Administrator  
EMAIL TO: Eaton-MonroviaSubContract@eurofinset.com  
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
Phone (626) 386-1165 Fax (626) 386-1122  
Invoices to: Eurofins Eaton Analytical, LLC  
Accounts Payable 2425 New Holland Pike, Lancaster, PA. 17605

Provide in each Report the  
Specified State Certification # and  
Exp Date for requested tests + matrix.  
Samples from CALIFORNIA



570-49609 Chain of Custody

Sample ID	Client Sample ID for reference onl	Sample Date & Time Matrix	PWS Systemcode	PWSID	JLS
202101270710	LH-INF-20210127	01/27/21 1101 DW			

Sample type:	Sample Event:	Facility ID:	Sample Point ID:	Static ID:

Method	Prep Method	Analysis Requested
EPA 1664		Oil and Grease by 1664(subbed)

Sample ID	Client Sample ID for reference onl	Sample Date & Time Matrix	PWS Systemcode	PWSID	JLS
202101270720	MB-INF-20210127	01/27/21 1301 DW			

Sample type:	Sample Event:	Facility ID:	Sample Point ID:	Static ID:

Method	Prep Method	Analysis Requested
EPA 1664		Oil and Grease by 1664(subbed)

Relinquished by: [Signature] Date: 1/28/21 Time: 12:33 Sample Control

Received by: [Signature] Date: 1/28/21 Time: 12:33

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Sample Control

Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

3-6/2-5 56



# Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-49609-1

**Login Number: 49609**

**List Number: 1**

**Creator: Ramos, Maribel**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)



## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 920474  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

### STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 920474  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **February 24, 2021** at **1440**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202102240313	GAC-1-20210224 Static ID: 537.1 @537.1	02/24/2021 0903
202102240314	GAC-2-20210224 Static ID: 537.1 @537.1	02/24/2021 0906
202102240315	GAC-3-20210224 Static ID: 537.1 @537.1	02/24/2021 0909
202102240316	GAC-4-20210224 Static ID: 537.1 @537.1	02/24/2021 0912
202102240317	IX-1-20210224 Static ID: 537.1 @537.1	02/24/2021 0915
202102240318	IX-2-20210224 Static ID: 537.1 @537.1	02/24/2021 0918
202102240319	IX-3-20210224 Static ID: 537.1 @537.1	02/24/2021 0921
202102240320	IX-4-20210224 Static ID: 537.1 @537.1	02/24/2021 0924
202102240321	LH-INF-20210224 Static ID: 537.1 @537.1	02/24/2021 0927
		Dissolved Organic Carbon      Total Organic Carbon
202102240322	IX-5-20210224 Static ID: 537.1 @537.1	02/24/2021 1103
202102240323	IX-6-20210224 Static ID: 537.1	02/24/2021 1106



### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 920474  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

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 Phone:

The following samples were received from you on **February 24, 2021** at **1440**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

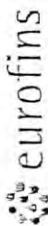
Sample #	Sample ID	Sample Date
	@537.1	
202102240324	IX-7-20210224 Static ID: 537.1	02/24/2021 1109
	@537.1	
202102240325	IX-8-20210224 Static ID: 537.1	02/24/2021 1112
	@537.1	
202102240326	GAC-5-20210224 Static ID: 537.1	02/24/2021 1115
	@537.1	
202102240328	GAC-6-20210224	02/24/2021 1118
	@537.1	
202102240329	GAC-7-20210224	02/24/2021 1121
	@537.1	
202102240330	GAC-8-20210224	02/24/2021 1124
	@537.1	
202102240331	MB-INF-20210224	02/24/2021 1127
	@537.1	
	Dissolved Organic Carbon	Total Organic Carbon

#### Test Description

@537.1 -- EPA Method 537.1







Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

01205174

## SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / NO

IR Gun ID = 649A (Observation = 13.4 °C) (Corr. Factor = 0.2 °C) (Final = 13.4 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up  Walk-In  FedEx / UPS / DHL / Area Fast / Top Line / Other:

## Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) Headspace:	VOA and Radon	No Samples with Headspace:	Samples with Headspace (see below):
Exempt from headspace concerns: Methods 815-4, HAA(8251,852), 805, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:			
Samp ID	None/<6 mm	Samp ID	None/<6 mm
Bottle #	>6mm	Bottle #	>6mm
mm		mm	

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors):

RECEIVED BY: [Signature] PRINT NAME: Yawc h u i s COMPANY/TITLE: Eurofins Eaton Analytical DATE: 2-24-21 TIME: 1440

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 920474  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	<b>202102240315</b>	<b><u>GAC-3-20210224</u></b>				
02/27/2021 17:09	Perfluorobutanesulfonic acid (PFBS)		0.0030		ug/L	0.0020
	<b>202102240317</b>	<b><u>IX-1-20210224</u></b>				
02/27/2021 18:06	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
02/27/2021 18:06	Perfluorooctanoic acid (PFOA)		0.0036		ug/L	0.0020
	<b>202102240318</b>	<b><u>IX-2-20210224</u></b>				
02/27/2021 18:16	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
02/27/2021 18:16	Perfluorooctanoic acid (PFOA)		0.0022		ug/L	0.0020
	<b>202102240319</b>	<b><u>IX-3-20210224</u></b>				
02/27/2021 18:25	Perfluoroheptanoic acid (PFHpA)		0.0023		ug/L	0.0020
02/27/2021 18:25	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
02/27/2021 18:25	Perfluorooctanoic acid (PFOA)		0.0053		ug/L	0.0020
	<b>202102240320</b>	<b><u>IX-4-20210224</u></b>				
02/27/2021 18:35	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
02/27/2021 18:35	Perfluorooctanoic acid (PFOA)		0.0021		ug/L	0.0020
	<b>202102240321</b>	<b><u>LH-INF-20210224</u></b>				
03/02/2021 19:30	Dissolved Organic Carbon		1.2		mg/L	0.40
02/27/2021 18:55	Perfluorobutanesulfonic acid (PFBS)		0.0067		ug/L	0.0020
02/27/2021 18:55	Perfluoroheptanoic acid (PFHpA)		0.0029		ug/L	0.0020
02/27/2021 18:55	Perfluorohexanesulfonic acid (PFHxS)		0.0065		ug/L	0.0020
02/27/2021 18:55	Perfluorohexanoic acid (PFHxA)		0.0078		ug/L	0.0020
02/27/2021 18:55	Perfluorononanoic acid (PFNA)		0.0034		ug/L	0.0020
02/27/2021 18:55	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
02/27/2021 18:55	Perfluorooctanoic acid (PFOA)		0.017		ug/L	0.0020
02/26/2021 20:53	Total Organic Carbon		0.58		mg/L	0.20
	<b>202102240322</b>	<b><u>IX-5-20210224</u></b>				
02/27/2021 19:06	Perfluorohexanoic acid (PFHxA)		0.0062		ug/L	0.0020
02/27/2021 19:06	Perfluorooctanoic acid (PFOA)		0.0030		ug/L	0.0020
	<b>202102240323</b>	<b><u>IX-6-20210224</u></b>				
02/27/2021 19:16	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
02/27/2021 19:16	Perfluorohexanoic acid (PFHxA)		0.0074		ug/L	0.0020
02/27/2021 19:16	Perfluorooctanoic acid (PFOA)		0.0038		ug/L	0.0020
	<b>202102240324</b>	<b><u>IX-7-20210224</u></b>				
02/27/2021 19:26	Perfluoroheptanoic acid (PFHpA)		0.0049		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
02/27/2021 19:26	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020
02/27/2021 19:26	Perfluorooctanoic acid (PFOA)		0.0088		ug/L	0.0020
		<b>202102240325 IX-8-20210224</b>				
02/27/2021 19:35	Perfluoroheptanoic acid (PFHpA)		0.0045		ug/L	0.0020
02/27/2021 19:35	Perfluorohexanoic acid (PFHxA)		0.0078		ug/L	0.0020
02/27/2021 19:35	Perfluorooctanoic acid (PFOA)		0.0051		ug/L	0.0020
		<b>202102240326 GAC-5-20210224</b>				
02/27/2021 19:45	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
02/27/2021 19:45	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
02/27/2021 19:45	Perfluorohexanesulfonic acid (PFHxS)		0.0040		ug/L	0.0020
02/27/2021 19:45	Perfluorohexanoic acid (PFHxA)		0.0075		ug/L	0.0020
02/27/2021 19:45	Perfluorononanoic acid (PFNA)		0.0020		ug/L	0.0020
02/27/2021 19:45	Perfluorooctanesulfonic acid (PFOS)		0.012		ug/L	0.0020
02/27/2021 19:45	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		<b>202102240328 GAC-6-20210224</b>				
02/27/2021 19:54	Perfluorobutanesulfonic acid (PFBS)		0.013		ug/L	0.0020
02/27/2021 19:54	Perfluoroheptanoic acid (PFHpA)		0.0060		ug/L	0.0020
02/27/2021 19:54	Perfluorohexanesulfonic acid (PFHxS)		0.0048		ug/L	0.0020
02/27/2021 19:54	Perfluorohexanoic acid (PFHxA)		0.0089		ug/L	0.0020
02/27/2021 19:54	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
		<b>202102240329 GAC-7-20210224</b>				
02/27/2021 20:04	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
02/27/2021 20:04	Perfluoroheptanoic acid (PFHpA)		0.0047		ug/L	0.0020
02/27/2021 20:04	Perfluorohexanesulfonic acid (PFHxS)		0.0060		ug/L	0.0020
02/27/2021 20:04	Perfluorohexanoic acid (PFHxA)		0.0080		ug/L	0.0020
02/27/2021 20:04	Perfluorononanoic acid (PFNA)		0.0023		ug/L	0.0020
02/27/2021 20:04	Perfluorooctanesulfonic acid (PFOS)		0.013		ug/L	0.0020
02/27/2021 20:04	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
		<b>202102240330 GAC-8-20210224</b>				
02/27/2021 20:13	Perfluorobutanesulfonic acid (PFBS)		0.0091		ug/L	0.0020
02/27/2021 20:13	Perfluoroheptanoic acid (PFHpA)		0.0027		ug/L	0.0020
02/27/2021 20:13	Perfluorohexanesulfonic acid (PFHxS)		0.0023		ug/L	0.0020
02/27/2021 20:13	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
02/27/2021 20:13	Perfluorooctanesulfonic acid (PFOS)		0.0050		ug/L	0.0020
02/27/2021 20:13	Perfluorooctanoic acid (PFOA)		0.0068		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	<b>202102240331</b>	<b><u>MB-INF-20210224</u></b>				
03/02/2021 19:48	Dissolved Organic Carbon		1.3		mg/L	0.40
02/27/2021 20:23	Perfluorobutanesulfonic acid (PFBS)		0.0096		ug/L	0.0020
02/27/2021 20:23	Perfluorodecanoic acid (PFDA)		0.0021		ug/L	0.0020
02/27/2021 20:23	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
02/27/2021 20:23	Perfluorohexanesulfonic acid (PFHxS)		0.0067		ug/L	0.0020
02/27/2021 20:23	Perfluorohexanoic acid (PFHxA)		0.0067		ug/L	0.0020
02/27/2021 20:23	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
02/27/2021 20:23	Perfluorooctanesulfonic acid (PFOS)		0.042		ug/L	0.0020
02/27/2021 20:23	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
02/26/2021 21:15	Total Organic Carbon		0.70		mg/L	0.20



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Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20210224 (202102240313)</b>					<b>Sampled on 02/24/2021 0903</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	13C2-PFDA	88	%		1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	13C2-PFHxA	102	%		1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	100	%		1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	102	%		1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	82	%		1

<b>GAC-2-20210224 (202102240314)</b>					<b>Sampled on 02/24/2021 0906</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	13C2-PFDA	77	%		1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	13C2-PFHxA	91	%		1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	118	%		1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	88	%		1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	103	%		1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	85	%		1

**GAC-3-20210224 (202102240315)**

Sampled on 02/24/2021 0909

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0030	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	13C2-PFDA	83	%		1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	13C2-PFHxA	98	%		1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	93	%		1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	100	%		1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1

**GAC-4-20210224 (202102240316)**

Sampled on 02/24/2021 0912

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.

(c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	13C2-PFDA	77	%		1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	13C2-PFHxA	93	%		1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	114	%		1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	90	%		1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	100	%		1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	83	%		1

**IX-1-20210224 (202102240317)**

Static ID: 537.1

Sampled on 02/24/2021 0915

**EPA 537.1 - EPA Method 537.1**

02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0036	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	13C2-PFDA	94	%		1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	13C2-PFHxA	107	%		1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	101	%		1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	103	%		1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1

**IX-2-20210224 (202102240318)**

**Sampled on 02/24/2021 0918**

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0022	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	13C2-PFDA	88	%		1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	13C2-PFHxA	103	%		1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	97	%		1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	102	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1
<b>IX-3-20210224 (202102240319)</b>						<b>Sampled on 02/24/2021 0921</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0023	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0053	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	13C2-PFDA	88	%		1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	13C2-PFHxA	101	%		1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	97	%		1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	105	%		1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	90	%		1

<b>IX-4-20210224 (202102240320)</b>						<b>Sampled on 02/24/2021 0924</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0021	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	13C2-PFDA	92	%		1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	13C2-PFHxA	98	%		1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	94	%		1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	102	%		1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	d5-NMeFOSAA	94	%		1

**LH-INF-20210224 (202102240321)**

Sampled on 02/24/2021 0927

Static ID: 537.1

**SM 5310C - Total Organic Carbon**

02/26/21 20:53	1309647	(SM 5310C)	Total Organic Carbon	0.58	mg/L	0.20	1
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**SM 5310C - Dissolved Organic Carbon**

02/25/21 03/02/21 19:30	1309528	1310664	(SM 5310C)	Dissolved Organic Carbon	1.2	mg/L	0.40	2
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**EPA 537.1 - EPA Method 537.1**

02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0067	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0029	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0065	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0078	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0034	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.017	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	13C2-PFDA	88	%		1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	13C2-PFHxA	100	%		1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	99	%		1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	101	%		1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	88	%		1

**IX-5-20210224 (202102240322)**

Sampled on 02/24/2021 1103

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0062	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0030	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	13C2-PFDA	86	%		1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	13C2-PFHxA	99	%		1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	96	%		1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	106	%		1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	84	%		1

**IX-6-20210224 (202102240323)**

Sampled on 02/24/2021 1106

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0074	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0038	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	13C2-PFDA	87	%		1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	13C2-PFHxA	97	%		1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	95	%		1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	107	%		1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	90	%		1

**IX-7-20210224 (202102240324)**

Sampled on 02/24/2021 1109

Static ID: 537.1

**EPA 537.1 - EPA Method 537.1**

02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0049	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0088	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	13C2-PFDA	83	%		1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	13C2-PFHxA	98	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	91	%		1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	111	%		1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1
<b><u>IX-8-20210224 (202102240325)</u></b>						<b>Sampled on 02/24/2021 1112</b>			
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0045	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0078	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0051	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	13C2-PFDA	86	%		1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	13C2-PFHxA	98	%		1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	95	%		1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	107	%		1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1

**GAC-5-20210224 (202102240326)**

Static ID: 537.1

**Sampled on 02/24/2021 1115**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution	
<b>EPA 537.1 - EPA Method 537.1</b>										
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	11-chloro-eicos-afluoro-3-oxaundecane-sulfonic acid	ug/L	0.0020	1	
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ug/L	0.0020	1	
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ug/L	0.0020	1	
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ug/L	0.0020	1	
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ug/L	0.0020	1	
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ug/L	0.0020	1	
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0040	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0075	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0020	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.012	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	13C2-PFDA	88	%		1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	13C2-PFHxA	100	%		1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	97	%		1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	106	%		1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1

**GAC-6-20210224 (202102240328)**

Sampled on 02/24/2021 1118

<b>EPA 537.1 - EPA Method 537.1</b>									
02/25/21	02/27/21	19:54	1309506	1310391	(EPA 537.1)	11-chloro-eicos-afluoro-3-oxaundecane-sulfonic acid	ug/L	0.0020	1
02/25/21	02/27/21	19:54	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ug/L	0.0020	1
02/25/21	02/27/21	19:54	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.013	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0060	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0048	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0089	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	13C2-PFDA	87	%		1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	13C2-PFHxA	103	%		1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	99	%		1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	104	%		1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1

**GAC-7-20210224 (202102240329)**

Sampled on 02/24/2021 1121

**EPA 537.1 - EPA Method 537.1**

02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0047	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0060	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0080	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0023	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.013	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	13C2-PFDA	95	%		1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	13C2-PFHxA	106	%		1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	100	%		1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	105	%		1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	92	%		1

**GAC-8-20210224 (202102240330)**

Sampled on 02/24/2021 1124

**EPA 537.1 - EPA Method 537.1**

02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0091	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0027	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0023	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0050	ug/L	0.0020	1

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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0068	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	13C2-PFDA	91	%		1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	13C2-PFHxA	102	%		1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	97	%		1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	106	%		1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	90	%		1

**MB-INF-20210224 (202102240331)**

Sampled on 02/24/2021 1127

**SM 5310C - Total Organic Carbon**

02/26/21 21:15	1309647	(SM 5310C)	Total Organic Carbon	0.70	mg/L	0.20	1
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**SM 5310C - Dissolved Organic Carbon**

02/25/21 03/02/21 19:48	1309528	1310664	(SM 5310C)	Dissolved Organic Carbon	1.3	mg/L	0.40	2
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**EPA 537.1 - EPA Method 537.1**

02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0096	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0021	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0067	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0067	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.042	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

**Report:** 920474  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**

Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	13C2-PFDA	88	%		1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	13C2-PFHxA	103	%		1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	99	%		1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	110	%		1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	112	%		1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



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Report: 920474  
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Water Replenishment District

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**Total Organic Carbon**

**Analytical Batch: 1309647**

202102240321                    LH-INF-20210224  
202102240331                    MB-INF-20210224

**Analysis Date: 02/26/2021**

Analyzed by: ZB2Z  
Analyzed by: ZB2Z

**EPA Method 537.1**

**Prep Batch: 1309506    Analytical Batch: 1310391**

202102240313                    GAC-1-20210224  
202102240314                    GAC-2-20210224  
202102240315                    GAC-3-20210224  
202102240316                    GAC-4-20210224  
202102240317                    IX-1-20210224  
202102240318                    IX-2-20210224  
202102240319                    IX-3-20210224  
202102240320                    IX-4-20210224  
202102240321                    LH-INF-20210224  
202102240322                    IX-5-20210224  
202102240323                    IX-6-20210224  
202102240324                    IX-7-20210224  
202102240325                    IX-8-20210224  
202102240326                    GAC-5-20210224  
202102240328                    GAC-6-20210224  
202102240329                    GAC-7-20210224  
202102240330                    GAC-8-20210224  
202102240331                    MB-INF-20210224

**Analysis Date: 02/27/2021**

Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
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Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM

**Dissolved Organic Carbon**

**Prep Batch: 1309528    Analytical Batch: 1310664**

202102240321                    LH-INF-20210224  
202102240331                    MB-INF-20210224

**Analysis Date: 03/02/2021**

Analyzed by: ZB2Z  
Analyzed by: ZB2Z

Tel: (626) 386-1100  
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Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Total Organic Carbon by SM 5310C</b>									
<b>Analytical Batch: 1309647</b>					<b>Analysis Date: 02/26/2021</b>				
LCS1	Total Organic Carbon		5	5.44	mg/L	109	(90-110)		
LCS2	Total Organic Carbon		5	5.44	mg/L	109	(90-110)	20	0.0
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.254	mg/L	127	(50-150)		
MS_202102230856	Total Organic Carbon	1.4	4	4.36	mg/L	<u>73</u>	(80-120)		
MS2_202102240484	Total Organic Carbon	ND	2	2.58	mg/L	<u>122</u>	(80-120)		
MSD_202102230856	Total Organic Carbon	1.4	4	4.32	mg/L	<u>72</u>	(80-120)	20	0.58
MSD2_202102240484	Total Organic Carbon	ND	2	2.42	mg/L	114	(80-120)	20	6.2

**EPA Method 537.1 by EPA 537.1**

**Prep Batch: 1309506 Analytical Batch: 1310391**

**Analysis Date: 02/27/2021**

DUP_202102240315	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0458	ug/L	97	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0456	ug/L	97	(70-130)	30	0.44
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00186	ug/L	99	(50-150)		
MS_202102240313	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00191	ug/L	102	(50-150)		
DUP_202102240315	13C2-PFDA (S)			84.8	%	85	(70-130)		
LCS3	13C2-PFDA (S)		100	90.9	%	91	(70-130)		
LCS4	13C2-PFDA (S)		100	93.5	%	93	(70-130)		
MBLK	13C2-PFDA (S)			94.3	%	94	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.4	%	98	(70-130)		
MS_202102240313	13C2-PFDA (S)		100	95.8	%	96	(70-130)		
DUP_202102240315	13C2-PFHxA (S)			95.1	%	95	(70-130)		
LCS3	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS4	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MBLK	13C2-PFHxA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MS_202102240313	13C2-PFHxA (S)		100	110	%	110	(70-130)		
DUP_202102240315	13C2-PFOA- IS#1 (I)			113	%	113	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			98.8	%	99	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS_202102240313	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
DUP_202102240315	13C3-HFPO-DA (S)			92.5	%	92	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	13C3-HFPO-DA (S)		100	96.8	%	97	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MBLK	13C3-HFPO-DA (S)			103	%	103	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MS_202102240313	13C3-HFPO-DA (S)		100	104	%	105	(70-130)		
DUP_202102240315	13C4-PFOS- IS#2 (I)			105	%	105	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS_202102240313	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
DUP_202102240315	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0517	ug/L	107	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0518	ug/L	107	(70-130)	30	0.39
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00221	ug/L	117	(50-150)		
MS_202102240313	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00219	ug/L	116	(50-150)		
DUP_202102240315	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0484	ug/L	104	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0487	ug/L	104	(70-130)	30	0.62
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00212	ug/L	114	(50-150)		
MS_202102240313	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00209	ug/L	113	(50-150)		
DUP_202102240315	d3-NMeFOSAA (I)			101	%	101	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	99.9	%	100	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	99.7	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			92.9	%	93	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MS_202102240313	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
DUP_202102240315	d5-NEtFOSAA (S)			89.5	%	90	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	86.9	%	87	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	88.2	%	88	(70-130)		
MBLK	d5-NEtFOSAA (S)			95.2	%	95	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	91.4	%	91	(70-130)		
MS_202102240313	d5-NEtFOSAA (S)		100	97.3	%	97	(70-130)		
DUP_202102240315	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0522	ug/L	104	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0528	ug/L	106	(70-130)	30	1.1

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 920474  
 Project: 0250000  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00222	ug/L	111	(50-150)		
MS_202102240313	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00220	ug/L	110	(50-150)		
DUP_202102240315	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0491	ug/L	98	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0486	ug/L	97	(70-130)	30	1.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00205	ug/L	102	(50-150)		
MS_202102240313	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00213	ug/L	107	(50-150)		
DUP_202102240315	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0506	ug/L	101	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0511	ug/L	102	(70-130)	30	0.98
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00225	ug/L	112	(50-150)		
MS_202102240313	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00226	ug/L	113	(50-150)		
DUP_202102240315	Perfluorobutanesulfonic acid (PFBS)	0.0030		0.00301	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0483	ug/L	109	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0476	ug/L	108	(70-130)	30	1.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00206	ug/L	116	(50-150)		
MS_202102240313	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00311	ug/L	108	(50-150)		
DUP_202102240315	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0526	ug/L	105	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0518	ug/L	104	(70-130)	30	1.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00219	ug/L	110	(50-150)		
MS_202102240313	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00218	ug/L	109	(50-150)		
DUP_202102240315	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0502	ug/L	100	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0525	ug/L	105	(70-130)	30	4.5
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202102240313	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00200	ug/L	100	(50-150)		
DUP_202102240315	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0549	ug/L	110	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0555	ug/L	111	(70-130)	30	1.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00231	ug/L	116	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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 (S) - Indicates surrogate compound.  
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Report: 920474  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202102240313	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00249	ug/L	114	(50-150)		
DUP_202102240315	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0488	ug/L	107	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0492	ug/L	108	(70-130)	30	0.82
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00212	ug/L	116	(50-150)		
MS_202102240313	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00228	ug/L	119	(50-150)		
DUP_202102240315	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0566	ug/L	113	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0568	ug/L	114	(70-130)	30	0.35
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00237	ug/L	119	(50-150)		
MS_202102240313	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00372	ug/L	112	(50-150)		
DUP_202102240315	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0523	ug/L	105	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0549	ug/L	110	(70-130)	30	4.8
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00230	ug/L	115	(50-150)		
MS_202102240313	Perfluorononanoic acid (PFNA)	ND	0.002	0.00230	ug/L	111	(50-150)		
DUP_202102240315	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0494	ug/L	107	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0481	ug/L	104	(70-130)	30	2.7
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00225	ug/L	121	(50-150)		
MS_202102240313	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00237	ug/L	115	(50-150)		
DUP_202102240315	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0547	ug/L	109	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0550	ug/L	110	(70-130)	30	0.55
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00238	ug/L	119	(50-150)		
MS_202102240313	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00295	ug/L	113	(50-150)		
DUP_202102240315	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0500	ug/L	100	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0482	ug/L	96	(70-130)	30	3.7
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00182	ug/L	91	(50-150)		
MS_202102240313	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00189	ug/L	95	(50-150)		
DUP_202102240315	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 920474  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0467	ug/L	93	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0476	ug/L	95	(70-130)	30	1.9
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00200	ug/L	100	(50-150)		
MS_202102240313	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00203	ug/L	101	(50-150)		
DUP_202102240315	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0510	ug/L	102	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0501	ug/L	100	(70-130)	30	1.8
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00206	ug/L	103	(50-150)		
MS_202102240313	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00211	ug/L	105	(50-150)		

Dissolved Organic Carbon by SM 5310C

Analytical Batch: 1310664

Analysis Date: 03/02/2021

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Dissolved Organic Carbon		5	5.12	mg/L	102	(90-110)		
LCS2	Dissolved Organic Carbon		5	5.07	mg/L	101	(90-110)	20	0.98
MBLK	Dissolved Organic Carbon			<0.10	mg/L				
MRL_CHK	Dissolved Organic Carbon		0.2	0.299	mg/L	150	(50-150)		
MS_202103030146	Dissolved Organic Carbon	2.5	4	6.29	mg/L	94	(80-120)		
MS2_202103030147	Dissolved Organic Carbon	2.6	2	4.46	mg/L	94	(80-120)		
MSD_202103030146	Dissolved Organic Carbon	2.5	4	6.44	mg/L	97	(80-120)	20	2.3
MSD2_202103030147	Dissolved Organic Carbon	2.6	2	4.52	mg/L	97	(80-120)	20	1.4

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 03/06/2021

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 03/06/2021

, Tel Fax



**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 03/06/2021

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for  
Presence or Absence, Quantification of Total Coliform and E. Coli  
By Quantitray**

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 03/06/2021

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 925810  
Project: 0250000  
Group: WRD Pilot [Set #1]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>-2</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 925810  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **March 25, 2021 at 1620**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202103250304</u>	GAC-1-20210325	03/25/2021 1004
	@537.1	
<u>202103250305</u>	GAC-2-20210325	03/25/2021 1007
	@537.1	
<u>202103250306</u>	GAC-3-20210325	03/25/2021 1010
	@537.1	
<u>202103250307</u>	GAC-4-20210325	03/25/2021 1013
	@537.1	
<u>202103250308</u>	IX-1--20210325	03/25/2021 1016
	@537.1	
<u>202103250309</u>	IX-2-20210325	03/25/2021 1019
	@537.1	
<u>202103250310</u>	IX-3-20210325	03/25/2021 1022
	@537.1	
<u>202103250311</u>	IX-4-20210325	03/25/2021 1025
	@537.1	
<u>202103250312</u>	GAC-1M-20210325	03/25/2021 1028
	@537.1	
<u>202103250313</u>	GAC-2M-20210325	03/25/2021 1031
	@537.1	
<u>202103250314</u>	GAC-3M-20210325	03/25/2021 1034
	@537.1	
<u>202103250315</u>	GAC-4M-20210325	03/25/2021 1037
	@537.1	
<u>202103250316</u>	IX-1M-20210325	03/25/2021 1040
	@537.1	

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 925810  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **March 25, 2021** at **1620**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202103250317	IX-2M-20210325	03/25/2021 1043
	@537.1	
202103250318	IX-3M-20210325	03/25/2021 1046
	@537.1	
202103250319	IX-4M-20210325	03/25/2021 1049
	@537.1	
202103250320	LH-INF-20210325	03/25/2021 1052
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Calcium Total ICAP
	Chloride	Hexavalent chromium(Dissolved)
	Iron Total ICAP	Magnesium Total ICAP
	Manganese Total ICAP/MS	Potassium Total ICAP
	Sodium Total ICAP	Total Dissolved Solid (TDS)
	Total Hardness as CaCO3 by ICP	Total Suspended Solids (TSS)
	Uranium by ICPMS as pCi/L	Uranium ICAP/MS
202103250321	IX-5-20210325	03/25/2021 1204
	@537.1	
202103250322	IX-6-20210325	03/25/2021 1207
	@537.1	
202103250323	IX-7-20210325	03/25/2021 1210
	@537.1	
202103250324	IX-8-20210325	03/25/2021 1213
	@537.1	
202103250325	GAC-5-20210325	03/25/2021 1216
	@537.1	
202103250326	GAC-6-20210325	03/25/2021 1219
	@537.1	
202103250327	GAC-7-20210325	03/25/2021 1222



### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 925810  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **March 25, 2021** at **1620**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202103250328	GAC-8-20210325	03/25/2021 1225
	@537.1	
202103250329	IX-5M-20210325	03/25/2021 1403
	@537.1	
202103250330	IX-6M-20210325	03/25/2021 1406
	@537.1	
202103250331	IX-7M-20210325	03/25/2021 1409
	@537.1	
202103250332	IX-8M-20210325	03/25/2021 1412
	@537.1	
202103250333	GAC-5M-20210325	03/25/2021 1415
	@537.1	
202103250334	GAC-6M-20210325	03/25/2021 1418
	@537.1	
202103250335	GAC-7M-20210325	03/25/2021 1421
	@537.1	
202103250336	GAC-8M-20210325	03/25/2021 1424
	@537.1	
202103250337	MB-INF--20210325	03/25/2021 1228
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS
	Chloride	Calcium Total ICAP
	Iron Total ICAP	Dissolved Organic Carbon
	Manganese Total ICAP/MS	Hexavalent chromium(Dissolved)
	Sodium Total ICAP	L-CLO4
	Total Hardness as CaCO3 by ICP	Magnesium Total ICAP
	Uranium by ICPMS as pCi/L	Oil and Grease by 1664(subbed)
		Potassium Total ICAP
		Sulfate
		Total Dissolved Solid (TDS)
		Total Organic Carbon
		Total Suspended Solids (TSS)
		Uranium ICAP/MS

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 925810  
Project: 0250000  
Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

---

The following samples were received from you on **March 25, 2021** at **1620**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

---

Sample #	Sample ID	Sample Date
	<b>Test Description</b>	
	@537.1 -- EPA Method 537.1	
	@ANIONS48 -- Nitrate, Nitrite by EPA 300.0	
	@VOASDWA -- Volatile Organics by GCMS	





925610

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302																	
TEL: (949) 679-1070		E-MAIL: mjeon@gsi-net.com		LAB CONTACT: Sophia Liang																	
LABORATORY: Eurofins Eaton Analytical		GLOBAL ID: MIAE JEON		SAMPLER(S): (PRINT) RBT																	
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results		REQUESTED ANALYSES Please check box or fill in blank as needed.																	
LAB USE ONLY	SAMPLE ID	SAMPLING		NO. OF CONT.	MATRIX	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)	DOC	
		DATE	TIME																		
	IX-5-20210325	3-25	1204	2	Water	Unpreserved	X														
	IX-6-20210325		1207		Water	Preserved	X														
	IX-7-20210325		1210		Water		X														
	IX-8-20210325		1213		Water		X														
	GAC-5-20210325		1216		Water		X														
	GAC-6-20210325		1219		Water		X														
	GAC-7-20210325		1222		Water		X														
	GAC-8-20210325		1225		Water		X														
	<del>IX-5M-20210325</del>	3-25	1403	2	Water	Unpreserved	X														
	<del>IX-6M-20210325</del>		1406		Water		X														
	<del>IX-7M-20210325</del>		1409		Water		X														
	<del>IX-8M-20210325</del>		1412		Water		X														
	GAC-5M-GAC-5M-20210325		1415		Water		X														
	<del>GAC-6M-GAC-6M-20210325</del>		1418		Water		X														
	<del>GAC-7M-GAC-7M-20210325</del>		1421		Water		X														
	<del>GAC-8M-GAC-8M-20210325</del>		1424		Water		X														
	MB-INF-20210325	3-25	1228	15	Water	Unpreserved	X														
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Time: 1620																	
Relinquished by: (Signature)		Received by: (Signature) <i>[Signature]</i>		Time: 1620																	
Relinquished by: (Signature)		Received by: (Signature)		Time:																	



eurolins

Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

925810

## SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 616 (Observation = 3.3 °C) (Corr.Factor = 0.2 °C) (Final = 3.1 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Condition of Ice: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (If received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (If received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = °C) (Corr.Factor = °C) (Final = °C)	2 = (Observation = °C) (Corr.Factor = °C) (Final = °C)
3 = (Observation = °C) (Corr.Factor = °C) (Final = °C)	4 = (Observation = °C) (Corr.Factor = °C) (Final = °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (If received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

7) VOA and Radon Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, 5PME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Sample ID	None/<6 mm	6mm	None/<6 mm	6mm	None/<6 mm	6mm	None/<6 mm	6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: <u>Chris Brook</u>	PRINT NAME: <u>Chris Brook</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>3.25.21</u>	TIME: <u>1620</u>
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Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Report:** 925810  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

**Folder Comments**

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Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove,  
CAELAP 2944 exp 9-30-2021

**Flags Legend:**

- B4 - Target analyte detected in blank at or above method acceptance criteria.
- B7 - Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above the concentration found in the method blank.
- H1 - Sample analysis performed past holding time.
- LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.

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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202103250306      <u>GAC-3-20210325</u></b>						
03/30/2021 03:05	Perfluorobutanesulfonic acid (PFBS)		0.0036		ug/L	0.0020
03/30/2021 03:05	Perfluorohexanoic acid (PFHxA)		0.0022		ug/L	0.0020
<b>202103250308      <u>IX-1--20210325</u></b>						
03/30/2021 03:25	Perfluorohexanoic acid (PFHxA)		0.0039		ug/L	0.0020
03/30/2021 03:25	Perfluorooctanoic acid (PFOA)		0.0038		ug/L	0.0020
<b>202103250309      <u>IX-2-20210325</u></b>						
03/30/2021 03:34	Perfluoroheptanoic acid (PFHpA)		0.0023		ug/L	0.0020
03/30/2021 03:34	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
03/30/2021 03:34	Perfluorooctanoic acid (PFOA)		0.0030		ug/L	0.0020
<b>202103250310      <u>IX-3-20210325</u></b>						
03/30/2021 03:44	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
03/30/2021 03:44	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
03/30/2021 03:44	Perfluorooctanoic acid (PFOA)		0.0066		ug/L	0.0020
<b>202103250311      <u>IX-4-20210325</u></b>						
03/30/2021 14:06	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
03/30/2021 14:06	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
03/30/2021 14:06	Perfluorooctanoic acid (PFOA)		0.0028		ug/L	0.0020
<b>202103250312      <u>GAC-1M-20210325</u></b>						
03/30/2021 14:17	Perfluorobutanesulfonic acid (PFBS)		0.0062		ug/L	0.0020
03/30/2021 14:17	Perfluorohexanesulfonic acid (PFHxS)		0.0032		ug/L	0.0020
03/30/2021 14:17	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
03/30/2021 14:17	Perfluorooctanesulfonic acid (PFOS)		0.0084		ug/L	0.0020
03/30/2021 14:17	Perfluorooctanoic acid (PFOA)		0.0079		ug/L	0.0020
<b>202103250313      <u>GAC-2M-20210325</u></b>						
03/30/2021 14:27	Perfluorobutanesulfonic acid (PFBS)		0.0052		ug/L	0.0020
03/30/2021 14:27	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
03/30/2021 14:27	Perfluorooctanoic acid (PFOA)		0.0029		ug/L	0.0020
<b>202103250314      <u>GAC-3M-20210325</u></b>						
03/30/2021 14:36	Perfluorobutanesulfonic acid (PFBS)		0.0059		ug/L	0.0020
03/30/2021 14:36	Perfluorohexanesulfonic acid (PFHxS)		0.0040		ug/L	0.0020
03/30/2021 14:36	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
03/30/2021 14:36	Perfluorooctanesulfonic acid (PFOS)		0.0080		ug/L	0.0020
03/30/2021 14:36	Perfluorooctanoic acid (PFOA)		0.0085		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202103250315      <u>GAC-4M-20210325</u></b>						
03/30/2021 12:00	Perfluorobutanesulfonic acid (PFBS)		0.0026		ug/L	0.0020
03/30/2021 12:00	Perfluorooctanesulfonic acid (PFOS)		0.0036		ug/L	0.0020
03/30/2021 12:00	Perfluorooctanoic acid (PFOA)		0.0032		ug/L	0.0020
<b>202103250316      <u>IX-1M-20210325</u></b>						
03/30/2021 12:19	Perfluorobutanesulfonic acid (PFBS)		0.0022		ug/L	0.0020
03/30/2021 12:19	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
03/30/2021 12:19	Perfluorooctanesulfonic acid (PFOS)		0.0053		ug/L	0.0020
03/30/2021 12:19	Perfluorooctanoic acid (PFOA)		0.0074		ug/L	0.0020
<b>202103250317      <u>IX-2M-20210325</u></b>						
03/30/2021 14:46	Perfluorobutanesulfonic acid (PFBS)		0.0026		ug/L	0.0020
03/30/2021 14:46	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
03/30/2021 14:46	Perfluorooctanesulfonic acid (PFOS)		0.0020		ug/L	0.0020
03/30/2021 14:46	Perfluorooctanoic acid (PFOA)		0.0087		ug/L	0.0020
<b>202103250318      <u>IX-3M-20210325</u></b>						
03/30/2021 14:56	Perfluorobutanesulfonic acid (PFBS)		0.0040		ug/L	0.0020
03/30/2021 14:56	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
03/30/2021 14:56	Perfluorooctanesulfonic acid (PFOS)		0.0028		ug/L	0.0020
03/30/2021 14:56	Perfluorooctanoic acid (PFOA)		0.0087		ug/L	0.0020
<b>202103250319      <u>IX-4M-20210325</u></b>						
03/30/2021 15:05	Perfluorobutanesulfonic acid (PFBS)		0.0048		ug/L	0.0020
03/30/2021 15:05	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
03/30/2021 15:05	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
03/30/2021 15:05	Perfluorononanoic acid (PFNA)		0.0022		ug/L	0.0020
03/30/2021 15:05	Perfluorooctanesulfonic acid (PFOS)		0.0044		ug/L	0.0020
03/30/2021 15:05	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
<b>202103250320      <u>LH-INF-20210325</u></b>						
04/13/2021 00:11	Alkalinity in CaCO3 units		200		mg/L	2.0
03/30/2021 23:44	Arsenic Total ICAP/MS		2.6	10	ug/L	1.0
04/02/2021 4:43	Calcium Total ICAP		110		mg/L	1.0
03/26/2021 02:42	Chloride		110	250	mg/L	2.5
04/01/2021 16:14	Chloroform (Trichloromethane)		0.74		ug/L	0.50
03/30/2021 15:16	Dissolved Organic Carbon		0.63		mg/L	0.20
04/05/2021 12:26	Hexavalent chromium(Dissolved)		0.86		ug/L	0.020
04/02/2021 4:43	Magnesium Total ICAP		21		mg/L	0.10

**SUMMARY OF POSITIVE DATA ONLY**



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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
03/26/2021 02:42	Nitrate as Nitrogen by IC		3.0	10	mg/L	0.50
03/26/2021 02:42	Nitrate as NO3 (calc)		13	45	mg/L	2.2
03/30/2021 15:15	Perfluorobutanesulfonic acid (PFBS)		0.0072		ug/L	0.0020
03/30/2021 15:15	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
03/30/2021 15:15	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
03/30/2021 15:15	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
03/30/2021 15:15	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
03/30/2021 15:15	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
04/02/2021 4:43	Potassium Total ICAP		4.6		mg/L	1.0
04/02/2021 4:43	Sodium Total ICAP		70		mg/L	1.0
03/26/2021 02:42	Sulfate		160	250	mg/L	2.5
04/01/2021 01:08	Total Dissolved Solids (TDS)		640	500	mg/L	10
04/02/2021 05:51	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
03/26/2021 02:42	Total Nitrate, Nitrite-N, CALC		3.0		mg/L	0.10
03/31/2021 17:11	Total Organic Carbon		0.95		mg/L	0.20
04/01/2021 16:14	Total THM		0.74	80	ug/L	0.50
03/29/2021 14:29	Uranium by ICPMS as pCi/L		3.3		pCi/L	0.70
03/26/2021 22:33	Uranium ICAP/MS		4.9	30	ug/L	1.0
		<b>202103250321 IX-5-20210325</b>				
03/30/2021 15:25	Perfluoroheptanoic acid (PFHpA)		0.0020		ug/L	0.0020
03/30/2021 15:25	Perfluorohexanoic acid (PFHxA)		0.0062		ug/L	0.0020
03/30/2021 15:25	Perfluorooctanoic acid (PFOA)		0.0032		ug/L	0.0020
		<b>202103250322 IX-6-20210325</b>				
03/30/2021 15:34	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
03/30/2021 15:34	Perfluorohexanoic acid (PFHxA)		0.0073		ug/L	0.0020
03/30/2021 15:34	Perfluorooctanoic acid (PFOA)		0.0045		ug/L	0.0020
		<b>202103250323 IX-7-20210325</b>				
03/30/2021 17:32	Perfluoroheptanoic acid (PFHpA)		0.0045		ug/L	0.0020
03/30/2021 17:32	Perfluorohexanoic acid (PFHxA)		0.0064		ug/L	0.0020
03/30/2021 17:32	Perfluorooctanoic acid (PFOA)		0.010		ug/L	0.0020
		<b>202103250324 IX-8-20210325</b>				
03/30/2021 17:42	Perfluoroheptanoic acid (PFHpA)		0.0045		ug/L	0.0020
03/30/2021 17:42	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
03/30/2021 17:42	Perfluorooctanoic acid (PFOA)		0.0061		ug/L	0.0020
		<b>202103250325 GAC-5-20210325</b>				

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
03/30/2021 17:51	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
03/30/2021 17:51	Perfluoroheptanoic acid (PFHpA)		0.0035		ug/L	0.0020
03/30/2021 17:51	Perfluorohexanesulfonic acid (PFHxS)		0.0042		ug/L	0.0020
03/30/2021 17:51	Perfluorohexanoic acid (PFHxA)		0.0066		ug/L	0.0020
03/30/2021 17:51	Perfluorononanoic acid (PFNA)		0.0021		ug/L	0.0020
03/30/2021 17:51	Perfluorooctanesulfonic acid (PFOS)		0.013		ug/L	0.0020
03/30/2021 17:51	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		<b>202103250326      <u>GAC-6-20210325</u></b>				
03/30/2021 18:01	Perfluorobutanesulfonic acid (PFBS)		0.013		ug/L	0.0020
03/30/2021 18:01	Perfluoroheptanoic acid (PFHpA)		0.0055		ug/L	0.0020
03/30/2021 18:01	Perfluorohexanesulfonic acid (PFHxS)		0.0067		ug/L	0.0020
03/30/2021 18:01	Perfluorohexanoic acid (PFHxA)		0.0079		ug/L	0.0020
03/30/2021 18:01	Perfluorooctanesulfonic acid (PFOS)		0.0022		ug/L	0.0020
03/30/2021 18:01	Perfluorooctanoic acid (PFOA)		0.017		ug/L	0.0020
		<b>202103250327      <u>GAC-7-20210325</u></b>				
03/30/2021 18:11	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
03/30/2021 18:11	Perfluoroheptanoic acid (PFHpA)		0.0045		ug/L	0.0020
03/30/2021 18:11	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
03/30/2021 18:11	Perfluorohexanoic acid (PFHxA)		0.0076		ug/L	0.0020
03/30/2021 18:11	Perfluorononanoic acid (PFNA)		0.0027		ug/L	0.0020
03/30/2021 18:11	Perfluorooctanesulfonic acid (PFOS)		0.016		ug/L	0.0020
03/30/2021 18:11	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
		<b>202103250328      <u>GAC-8-20210325</u></b>				
03/30/2021 18:20	Perfluorobutanesulfonic acid (PFBS)		0.0096		ug/L	0.0020
03/30/2021 18:20	Perfluoroheptanoic acid (PFHpA)		0.0029		ug/L	0.0020
03/30/2021 18:20	Perfluorohexanesulfonic acid (PFHxS)		0.0026		ug/L	0.0020
03/30/2021 18:20	Perfluorohexanoic acid (PFHxA)		0.0066		ug/L	0.0020
03/30/2021 18:20	Perfluorooctanesulfonic acid (PFOS)		0.0064		ug/L	0.0020
03/30/2021 18:20	Perfluorooctanoic acid (PFOA)		0.0075		ug/L	0.0020
		<b>202103250329      <u>IX-5M-20210325</u></b>				
03/30/2021 18:30	Perfluorobutanesulfonic acid (PFBS)		0.0035		ug/L	0.0020
03/30/2021 18:30	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
03/30/2021 18:30	Perfluorohexanoic acid (PFHxA)		0.0060		ug/L	0.0020
03/30/2021 18:30	Perfluorononanoic acid (PFNA)		0.0021		ug/L	0.0020
03/30/2021 18:30	Perfluorooctanesulfonic acid (PFOS)		0.0052		ug/L	0.0020
03/30/2021 18:30	Perfluorooctanoic acid (PFOA)		0.0096		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202103250330      <u>IX-6M-20210325</u></b>						
03/30/2021 18:39	Perfluorobutanesulfonic acid (PFBS)		0.0040		ug/L	0.0020
03/30/2021 18:39	Perfluoroheptanoic acid (PFHpA)		0.0031		ug/L	0.0020
03/30/2021 18:39	Perfluorohexanoic acid (PFHxA)		0.0054		ug/L	0.0020
03/30/2021 18:39	Perfluorononanoic acid (PFNA)		0.0020		ug/L	0.0020
03/30/2021 18:39	Perfluorooctanesulfonic acid (PFOS)		0.0030		ug/L	0.0020
03/30/2021 18:39	Perfluorooctanoic acid (PFOA)		0.010		ug/L	0.0020
<b>202103250331      <u>IX-7M-20210325</u></b>						
03/30/2021 19:00	Perfluorobutanesulfonic acid (PFBS)		0.0087		ug/L	0.0020
03/30/2021 19:00	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
03/30/2021 19:00	Perfluorohexanoic acid (PFHxA)		0.0064		ug/L	0.0020
03/30/2021 19:00	Perfluorononanoic acid (PFNA)		0.0028		ug/L	0.0020
03/30/2021 19:00	Perfluorooctanesulfonic acid (PFOS)		0.0058		ug/L	0.0020
03/30/2021 19:00	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
<b>202103250332      <u>IX-8M-20210325</u></b>						
03/30/2021 19:11	Perfluorobutanesulfonic acid (PFBS)		0.0056		ug/L	0.0020
03/30/2021 19:11	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
03/30/2021 19:11	Perfluorohexanoic acid (PFHxA)		0.0067		ug/L	0.0020
03/30/2021 19:11	Perfluorononanoic acid (PFNA)		0.0023		ug/L	0.0020
03/30/2021 19:11	Perfluorooctanesulfonic acid (PFOS)		0.0032		ug/L	0.0020
03/30/2021 19:11	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
<b>202103250333      <u>GAC-5M-20210325</u></b>						
03/30/2021 19:20	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
03/30/2021 19:20	Perfluoroheptanoic acid (PFHpA)		0.0037		ug/L	0.0020
03/30/2021 19:20	Perfluorohexanesulfonic acid (PFHxS)		0.0060		ug/L	0.0020
03/30/2021 19:20	Perfluorohexanoic acid (PFHxA)		0.0064		ug/L	0.0020
03/30/2021 19:20	Perfluorononanoic acid (PFNA)		0.0031		ug/L	0.0020
03/30/2021 19:20	Perfluorooctanesulfonic acid (PFOS)		0.025		ug/L	0.0020
03/30/2021 19:20	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
<b>202103250334      <u>GAC-6M-20210325</u></b>						
03/30/2021 19:30	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
03/30/2021 19:30	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
03/30/2021 19:30	Perfluorohexanesulfonic acid (PFHxS)		0.0073		ug/L	0.0020
03/30/2021 19:30	Perfluorohexanoic acid (PFHxA)		0.0066		ug/L	0.0020
03/30/2021 19:30	Perfluorononanoic acid (PFNA)		0.0035		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
03/30/2021 19:30	Perfluorooctanesulfonic acid (PFOS)		0.026		ug/L	0.0020
03/30/2021 19:30	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
		<b>202103250335 GAC-7M-20210325</b>				
03/30/2021 19:40	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
03/30/2021 19:40	Perfluoroheptanoic acid (PFHpA)		0.0039		ug/L	0.0020
03/30/2021 19:40	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
03/30/2021 19:40	Perfluorohexanoic acid (PFHxA)		0.0063		ug/L	0.0020
03/30/2021 19:40	Perfluorononanoic acid (PFNA)		0.0035		ug/L	0.0020
03/30/2021 19:40	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
03/30/2021 19:40	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
		<b>202103250336 GAC-8M-20210325</b>				
03/30/2021 19:49	Perfluorobutanesulfonic acid (PFBS)		0.010		ug/L	0.0020
03/30/2021 19:49	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
03/30/2021 19:49	Perfluorohexanesulfonic acid (PFHxS)		0.0049		ug/L	0.0020
03/30/2021 19:49	Perfluorohexanoic acid (PFHxA)		0.0070		ug/L	0.0020
03/30/2021 19:49	Perfluorononanoic acid (PFNA)		0.0024		ug/L	0.0020
03/30/2021 19:49	Perfluorooctanesulfonic acid (PFOS)		0.020		ug/L	0.0020
03/30/2021 19:49	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
		<b>202103250337 MB-INF--20210325</b>				
04/14/2021 23:47	Alkalinity in CaCO3 units		160		mg/L	2.0
03/30/2021 23:47	Arsenic Total ICAP/MS		1.4	10	ug/L	1.0
04/02/2021 4:44	Calcium Total ICAP		63		mg/L	1.0
03/26/2021 03:21	Chloride		50	250	mg/L	2.5
03/30/2021 15:38	Dissolved Organic Carbon		0.76		mg/L	0.20
04/01/2021 13:59	Hexavalent chromium(Dissolved)		0.46		ug/L	0.020
04/02/2021 4:44	Magnesium Total ICAP		12		mg/L	0.10
03/26/2021 03:21	Nitrate as Nitrogen by IC		2.6	10	mg/L	0.50
03/26/2021 03:21	Nitrate as NO3 (calc)		11	45	mg/L	2.2
03/30/2021 19:59	Perfluorobutanesulfonic acid (PFBS)		0.010		ug/L	0.0020
03/30/2021 19:59	Perfluorodecanoic acid (PFDA)		0.0020		ug/L	0.0020
03/30/2021 19:59	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
03/30/2021 19:59	Perfluorohexanesulfonic acid (PFHxS)		0.0068		ug/L	0.0020
03/30/2021 19:59	Perfluorohexanoic acid (PFHxA)		0.0064		ug/L	0.0020
03/30/2021 19:59	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
03/30/2021 19:59	Perfluorooctanesulfonic acid (PFOS)		0.042		ug/L	0.0020
03/30/2021 19:59	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

**Report:** 925810  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
04/02/2021 4:44	Potassium Total ICAP		3.8		mg/L	1.0
04/02/2021 4:44	Sodium Total ICAP		52		mg/L	1.0
03/26/2021 03:21	Sulfate		72	250	mg/L	2.5
04/01/2021 01:09	Total Dissolved Solids (TDS)		390	500	mg/L	10
04/02/2021 05:51	Total Hardness as CaCO3 by ICP (calc)		210		mg/L	3.0
03/26/2021 03:21	Total Nitrate, Nitrite-N, CALC		2.6		mg/L	0.10
03/31/2021 17:29	Total Organic Carbon		1.0		mg/L	0.20
03/29/2021 14:29	Uranium by ICPMS as pCi/L		1.2		pCi/L	0.70
03/26/2021 22:42	Uranium ICAP/MS		1.9	30	ug/L	1.0

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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20210325 (202103250304)</b>					<b>Sampled on 03/25/2021 1004</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	13C2-PFDA	101	%		1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	13C2-PFHxA	111	%		1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	13C3-HFPO-DA	105	%		1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	d3-NMeFOSAA	105	%		1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	d5-NEtFOSAA	114	%		1

<b>GAC-2-20210325 (202103250305)</b>					<b>Sampled on 03/25/2021 1007</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	13C2-PFDA	102	%		1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	13C2-PFHxA	115	%		1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	13C3-HFPO-DA	110	%		1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	d3-NMeFOSAA	104	%		1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	d5-NEtFOSAA	114	%		1

**GAC-3-20210325 (202103250306)**

Sampled on 03/25/2021 1010

**EPA 537.1 - EPA Method 537.1**

03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0036	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0022	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	13C2-PFDA	108	%		1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	13C2-PFHxA	117	%		1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	13C3-HFPO-DA	108	%		1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	d3-NMeFOSAA	109	%		1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	d5-NEtFOSAA	115	%		1

**GAC-4-20210325 (202103250307)**

Sampled on 03/25/2021 1013

**EPA 537.1 - EPA Method 537.1**

03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	13C2-PFDA	103	%		1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	13C2-PFHxA	115	%		1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	13C3-HFPO-DA	109	%		1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	d3-NMeFOSAA	110	%		1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	d5-NEtFOSAA	112	%		1

**IX-1--20210325 (202103250308)**

Sampled on 03/25/2021 1016

**EPA 537.1 - EPA Method 537.1**

03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0038	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	13C2-PFDA	111	%		1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	13C2-PFHxA	122	%		1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	13C3-HFPO-DA	114	%		1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	d3-NMeFOSAA	108	%		1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	d5-NEtFOSAA	115	%		1

**IX-2-20210325 (202103250309)**

**Sampled on 03/25/2021 1019**

**EPA 537.1 - EPA Method 537.1**

03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0023	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0030	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	13C2-PFDA	109	%		1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	13C2-PFHxA	122	%		1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	13C3-HFPO-DA	110	%		1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	d3-NMeFOSAA	107	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	d5-NEtFOSAA	119	%		1
<b>IX-3-20210325 (202103250310)</b>					<b>Sampled on 03/25/2021 1022</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0066	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	13C2-PFDA	109	%		1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	13C2-PFHxA	120	%		1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	13C3-HFPO-DA	110	%		1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	d3-NMeFOSAA	108	%		1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	d5-NEtFOSAA	114	%		1

<b>IX-4-20210325 (202103250311)</b>					<b>Sampled on 03/25/2021 1025</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0028	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	13C2-PFDA	90	%		1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	13C2-PFHxA	97	%		1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	93	%		1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	96	%		1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	d5-NETFOSAA	93	%		1

**GAC-1M-20210325 (202103250312)**

Sampled on 03/25/2021 1028

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0062	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0032	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0084	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0079	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	13C2-PFDA	94	%		1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	13C2-PFHxA	98	%		1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	94	%		1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	98	%		1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	d5-NEtFOSAA	98	%		1

**GAC-2M-20210325 (202103250313)**

Sampled on 03/25/2021 1031

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0052	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0029	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	13C2-PFDA	93	%		1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	13C2-PFHxA	99	%		1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	97	%		1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	102	%		1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**GAC-3M-20210325 (202103250314)**

Sampled on 03/25/2021 1034

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0059	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0040	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0080	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0085	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	13C2-PFDA	98	%		1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	13C2-PFHxA	102	%		1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	95	%		1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	100	%		1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**GAC-4M-20210325 (202103250315)**

**Sampled on 03/25/2021 1037**

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0026	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0036	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0032	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	13C2-PFDA	93	%		1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	13C2-PFHxA	98	%		1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	96	%		1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	97	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	d5-NEtFOSAA	93	%		1
<b>IX-1M-20210325 (202103250316)</b>					<b>Sampled on 03/25/2021 1040</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0022	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0053	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0074	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	13C2-PFDA	94	%		1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	13C2-PFHxA	99	%		1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	96	%		1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	97	%		1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**IX-2M-20210325 (202103250317)**

**Sampled on 03/25/2021 1043**

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0026	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0020	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0087	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	13C2-PFDA	93	%		1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	13C2-PFHxA	97	%		1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	93	%		1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	98	%		1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	d5-NETFOSAA	91	%		1

**IX-3M-20210325 (202103250318)**

**Sampled on 03/25/2021 1046**

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0040	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0028	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0087	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	13C2-PFDA	96	%		1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	13C2-PFHxA	98	%		1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	95	%		1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	98	%		1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**IX-4M-20210325 (202103250319)**

**Sampled on 03/25/2021 1049**

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0048	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0022	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0044	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	13C2-PFDA	90	%		1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	13C2-PFHxA	96	%		1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	93	%		1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	99	%		1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	d5-NEFOSAA	91	%		1

**LH-INF-20210325 (202103250320)**

**Sampled on 03/25/2021 1052**

**EPA 200.8 - ICPMS Metals**

03/26/21	03/30/21 23:44	1316527	1317344	(EPA 200.8)	Arsenic Total ICAP/MS	2.6	ug/L	1.0	1
03/26/21	03/26/21 22:33	1316527	1316698	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
03/26/21	03/26/21 22:33	1316527	1316698	(EPA 200.8)	Uranium ICAP/MS	4.9	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

03/26/21	04/02/21 4:43	1316527	1318038	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
03/26/21	04/02/21 4:43	1316527	1318038	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.010	1
03/26/21	04/02/21 4:43	1316527	1318038	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
03/26/21	04/02/21 4:43	1316527	1318038	(EPA 200.7)	Potassium Total ICAP	4.6	mg/L	1.0	1
03/26/21	04/02/21 4:43	1316527	1318038	(EPA 200.7)	Sodium Total ICAP	70	mg/L	1.0	1

**SM 5310C - Total Organic Carbon**

	03/31/21 17:11		1317581	(SM 5310C)	Total Organic Carbon	0.95	mg/L	0.20	1
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**SM 5310C - Dissolved Organic Carbon**

03/26/21	03/30/21 15:16	1316507	1317205	(SM 5310C)	Dissolved Organic Carbon	0.63	mg/L	0.20	1
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**EPA 200.8 - Uranium by ICPMS as pCi/L**

	03/29/21 14:29			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.3 (c)	pCi/L	0.70	1
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**SM 2340B - Total Hardness as CaCO3 by ICP**

	04/02/21 05:51			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
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**EPA 218.6 - Hexavalent chromium(Dissolved)**

	04/05/21 12:26		1318504	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.86	ug/L	0.020	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

	03/26/21 02:42		1316448	(EPA 300.0)	Nitrate as Nitrogen by IC	3.0	mg/L	0.50	5
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Rounding on totals after summation.

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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	03/26/21 02:42		1316448	(EPA 300.0)	Nitrate as NO3 (calc)	13	mg/L	2.2	5
	03/26/21 02:42		1316448	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	03/26/21 02:42		1316448	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	3.0	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	03/26/21 02:42		1316449	(EPA 300.0)	Chloride	110 (B4)	mg/L	2.5	5
	03/26/21 02:42		1316449	(EPA 300.0)	Sulfate	160	mg/L	2.5	5
<b>EPA 314.0 - Perchlorate with 2 ug/L MRL</b>									
	03/26/21 19:02	(1)	1317011	(EPA 314.0)	Perchlorate- Low Level	ND	ug/L	2.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0072	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	13C2-PFDA	94	%		1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	13C2-PFHxA	101	%		1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	95	%		1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	101	%		1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	d5-NetFOSAA	91	%		1

Rounding on totals after summation.  
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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	03/31/21 17:11			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.956	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Bromoform	ND (LM)	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Carbon Tetrachloride	ND (LM)	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Chloroform (Trichloromethane)	0.74	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Total THM	0.74	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,2-Dichloroethane-d4	100	%		1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	4-Bromofluorobenzene	101	%		1

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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Toluene-d8	97	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	04/13/21 00:11		1320231	(SM 2320B)	Alkalinity in CaCO3 units	200 (H1)	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
03/31/21	04/01/21 01:08	1317655	1317659	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	640	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	04/02/21 16:13		1318035	(SM 2540D)	Total Suspended Solids (TSS)	ND (H1)	mg/L	10	1
<b><u>IX-5-20210325 (202103250321)</u></b>						<b>Sampled on 03/25/2021 1204</b>			
<b>EPA 537.1 - EPA Method 537.1</b>									
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0020	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0062	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0032	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	13C2-PFDA	88	%		1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	13C2-PFHxA	94	%		1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	90	%		1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	94	%		1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	d5-NetFOSAA	92	%		1

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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>IX-6-20210325 (202103250322)</b>					<b>Sampled on 03/25/2021 1207</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0073	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0045	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	13C2-PFDA	90	%		1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	13C2-PFHxA	98	%		1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	95	%		1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	96	%		1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	d5-NEtFOSAA	93	%		1

<b>IX-7-20210325 (202103250323)</b>					<b>Sampled on 03/25/2021 1210</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 925810  
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 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0045	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.010	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	13C2-PFDA	88	%		1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	13C2-PFHxA	93	%		1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	89	%		1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	103	%		1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	90	%		1

**IX-8-20210325 (202103250324)**

**Sampled on 03/25/2021 1213**

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0045	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0061	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	13C2-PFDA	81	%		1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	13C2-PFHxA	92	%		1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	86	%		1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	100	%		1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	86	%		1

**GAC-5-20210325 (202103250325)**

Sampled on 03/25/2021 1216

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0035	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0042	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0066	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0021	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.013	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	13C2-PFDA	83	%		1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	13C2-PFHxA	88	%		1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	84	%		1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	105	%		1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	88	%		1

**GAC-6-20210325 (202103250326)**

Sampled on 03/25/2021 1219

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.013	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0055	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0067	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0079	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0022	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.017	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	13C2-PFDA	93	%		1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	13C2-PFHxA	98	%		1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	95	%		1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	102	%		1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	88	%		1

**GAC-7-20210325 (202103250327)**

**Sampled on 03/25/2021 1222**

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0045	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0076	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0027	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.016	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	13C2-PFDA	93	%		1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	13C2-PFHxA	99	%		1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	95	%		1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	102	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	90	%		1
<b>GAC-8-20210325 (202103250328)</b>					<b>Sampled on 03/25/2021 1225</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0096	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0029	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0026	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0066	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0064	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0075	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	13C2-PFDA	88	%		1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	13C2-PFHxA	98	%		1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	91	%		1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	102	%		1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	92	%		1

**IX-5M-20210325 (202103250329)**

**Sampled on 03/25/2021 1403**

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0035	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0060	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0021	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0052	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0096	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	13C2-PFDA	91	%		1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	13C2-PFHxA	94	%		1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	90	%		1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	101	%		1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	d5-NETFOSAA	94	%		1

**IX-6M-20210325 (202103250330)**

**Sampled on 03/25/2021 1406**

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0040	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0031	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0054	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0020	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0030	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.010	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	13C2-PFDA	94	%		1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	13C2-PFHxA	101	%		1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	93	%		1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	102	%		1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	91	%		1

**IX-7M-20210325 (202103250331)**

**Sampled on 03/25/2021 1409**

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0087	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0028	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0058	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	13C2-PFDA	88	%		1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	13C2-PFHxA	95	%		1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	88	%		1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	96	%		1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	96	%		1

**IX-8M-20210325 (202103250332)**

Sampled on 03/25/2021 1412

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0056	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0067	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0023	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0032	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	13C2-PFDA	94	%		1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	13C2-PFHxA	99	%		1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	93	%		1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	103	%		1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	94	%		1

**GAC-5M-20210325 (202103250333)**

**Sampled on 03/25/2021 1415**

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0037	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0060	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0031	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.025	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	13C2-PFDA	116	%		1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	13C2-PFHxA	122	%		1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	115	%		1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	101	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	112	%		1
<b>GAC-6M-20210325 (202103250334)</b>					<b>Sampled on 03/25/2021 1418</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0073	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0066	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0035	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.026	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	13C2-PFDA	93	%		1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	13C2-PFHxA	98	%		1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	93	%		1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	101	%		1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**GAC-7M-20210325 (202103250335)**

**Sampled on 03/25/2021 1421**

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0039	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0035	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	13C2-PFDA	91	%		1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	13C2-PFHxA	97	%		1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	93	%		1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	101	%		1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	d5-NETFOSAA	91	%		1

**GAC-8M-20210325 (202103250336)**

Sampled on 03/25/2021 1424

**EPA 537.1 - EPA Method 537.1**

03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0049	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0070	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0024	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.020	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	13C2-PFDA	92	%		1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	13C2-PFHxA	97	%		1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	90	%		1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	102	%		1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**MB-INF--20210325 (202103250337)**

Sampled on 03/25/2021 1228

**EPA 200.8 - ICPMS Metals**

03/26/21	03/30/21 23:47	1316527	1317344	(EPA 200.8)	Arsenic Total ICAP/MS	1.4	ug/L	1.0	1
03/26/21	03/26/21 22:42	1316527	1316698	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
03/26/21	03/26/21 22:42	1316527	1316698	(EPA 200.8)	Uranium ICAP/MS	1.9	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

03/26/21	04/02/21 4:44	1316527	1318038	(EPA 200.7)	Calcium Total ICAP	63	mg/L	1.0	1
03/26/21	04/02/21 4:44	1316527	1318038	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.010	1
03/26/21	04/02/21 4:44	1316527	1318038	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	0.10	1
03/26/21	04/02/21 4:44	1316527	1318038	(EPA 200.7)	Potassium Total ICAP	3.8	mg/L	1.0	1
03/26/21	04/02/21 4:44	1316527	1318038	(EPA 200.7)	Sodium Total ICAP	52	mg/L	1.0	1

**SM 5310C - Total Organic Carbon**

03/31/21 17:29			1317581	(SM 5310C)	Total Organic Carbon	1.0	mg/L	0.20	1
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**SM 5310C - Dissolved Organic Carbon**

03/26/21	03/30/21 15:38	1316507	1317205	(SM 5310C)	Dissolved Organic Carbon	0.76	mg/L	0.20	1
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**EPA 200.8 - Uranium by ICPMS as pCi/L**

03/29/21 14:29				(EPA 200.8)	Uranium by ICPMS as pCi/L	1.2 (c)	pCi/L	0.70	1
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**SM 2340B - Total Hardness as CaCO3 by ICP**

Rounding on totals after summation.  
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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	04/02/21 05:51			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	210 (c)	mg/L	3.0	1
<b>EPA 218.6 - Hexavalent chromium(Dissolved)</b>									
	04/01/21 13:59		1318079	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.46	ug/L	0.020	1
<b>EPA 300.0 - Nitrate, Nitrite by EPA 300.0</b>									
	03/26/21 03:21		1316448	(EPA 300.0)	Nitrate as Nitrogen by IC	2.6	mg/L	0.50	5
	03/26/21 03:21		1316448	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
	03/26/21 03:21		1316448	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	03/26/21 03:21		1316448	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.6	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	03/26/21 03:21		1316449	(EPA 300.0)	Chloride	50 (B4)	mg/L	2.5	5
	03/26/21 03:21		1316449	(EPA 300.0)	Sulfate	72	mg/L	2.5	5
<b>EPA 314.0 - Perchlorate with 2 ug/L MRL</b>									
	03/26/21 19:27	(1)	1317011	(EPA 314.0)	Perchlorate- Low Level	ND	ug/L	2.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0020	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0068	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.042	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	13C2-PFDA	90	%		1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	13C2-PFHxA	95	%		1

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 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	91	%		1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	103	%		1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	90	%		1
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	03/31/21 17:11			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.971	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Bromoform	ND (LM)	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Carbon Tetrachloride	ND (LM)	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1

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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1

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**Report:** 925810  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,2-Dichloroethane-d4	100	%		1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	4-Bromofluorobenzene	99	%		1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Toluene-d8	98	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	04/14/21 23:47		1320930	(SM 2320B)	Alkalinity in CaCO3 units	160 (B7,H1)	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
03/31/21	04/01/21 01:09	1317655	1317659	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	390	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	04/02/21 16:14		1318035	(SM 2540D)	Total Suspended Solids (TSS)	ND (H1)	mg/L	10	1

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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1316448**

202103250320 LH-INF-20210325  
 202103250337 MB-INF--20210325

**Analysis Date: 03/26/2021**

Analyzed by: A9QW  
 Analyzed by: A9QW

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1316449**

202103250320 LH-INF-20210325  
 202103250337 MB-INF--20210325

**Analysis Date: 03/26/2021**

Analyzed by: A9QW  
 Analyzed by: A9QW

**ICPMS Metals**

**Prep Batch: 1316527 Analytical Batch: 1316698**

202103250320 LH-INF-20210325  
 202103250337 MB-INF--20210325

**Analysis Date: 03/26/2021**

Analyzed by: AZS  
 Analyzed by: AZS

**Perchlorate with 2 ug/L MRL**

**Analytical Batch: 1317011**

202103250320 LH-INF-20210325  
 202103250337 MB-INF--20210325

**Analysis Date: 03/26/2021**

Analyzed by: H5VG  
 Analyzed by: H5VG

**EPA Method 537.1**

**Prep Batch: 1316762 Analytical Batch: 1317175**

202103250304 GAC-1-20210325  
 202103250305 GAC-2-20210325  
 202103250306 GAC-3-20210325  
 202103250307 GAC-4-20210325  
 202103250308 IX-1--20210325  
 202103250309 IX-2-20210325  
 202103250310 IX-3-20210325

**Analysis Date: 03/30/2021**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM

**Dissolved Organic Carbon**

**Prep Batch: 1316507 Analytical Batch: 1317205**

202103250320 LH-INF-20210325  
 202103250337 MB-INF--20210325

**Analysis Date: 03/30/2021**

Analyzed by: ZB2Z  
 Analyzed by: ZB2Z

**ICPMS Metals**

**Prep Batch: 1316527 Analytical Batch: 1317344**

202103250320 LH-INF-20210325  
 202103250337 MB-INF--20210325

**Analysis Date: 03/30/2021**

Analyzed by: AZS  
 Analyzed by: AZS

**Total Organic Carbon**

**Analytical Batch: 1317581**

202103250320 LH-INF-20210325  
 202103250337 MB-INF--20210325

**Analysis Date: 03/31/2021**

Analyzed by: ZB2Z  
 Analyzed by: ZB2Z

**EPA Method 537.1**

**Prep Batch: 1316897 Analytical Batch: 1317597**

202103250311 IX-4-20210325  
 202103250312 GAC-1M-20210325

**Analysis Date: 03/30/2021**

Analyzed by: Y7BM  
 Analyzed by: Y7BM

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**Report:** 925810  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District

202103250313	GAC-2M-20210325	Analyzed by: Y7BM
202103250314	GAC-3M-20210325	Analyzed by: Y7BM
202103250315	GAC-4M-20210325	Analyzed by: Y7BM
202103250316	IX-1M-20210325	Analyzed by: Y7BM
202103250317	IX-2M-20210325	Analyzed by: Y7BM
202103250318	IX-3M-20210325	Analyzed by: Y7BM
202103250319	IX-4M-20210325	Analyzed by: Y7BM
202103250320	LH-INF-20210325	Analyzed by: Y7BM
202103250321	IX-5-20210325	Analyzed by: Y7BM
202103250322	IX-6-20210325	Analyzed by: Y7BM

**EPA Method 537.1**

**Prep Batch: 1316910 Analytical Batch: 1317598**

**Analysis Date: 03/30/2021**

202103250323	IX-7-20210325	Analyzed by: Y7BM
202103250324	IX-8-20210325	Analyzed by: Y7BM
202103250325	GAC-5-20210325	Analyzed by: Y7BM
202103250326	GAC-6-20210325	Analyzed by: Y7BM
202103250327	GAC-7-20210325	Analyzed by: Y7BM
202103250328	GAC-8-20210325	Analyzed by: Y7BM
202103250329	IX-5M-20210325	Analyzed by: Y7BM
202103250330	IX-6M-20210325	Analyzed by: Y7BM
202103250331	IX-7M-20210325	Analyzed by: Y7BM
202103250332	IX-8M-20210325	Analyzed by: Y7BM
202103250333	GAC-5M-20210325	Analyzed by: Y7BM
202103250334	GAC-6M-20210325	Analyzed by: Y7BM
202103250335	GAC-7M-20210325	Analyzed by: Y7BM
202103250336	GAC-8M-20210325	Analyzed by: Y7BM
202103250337	MB-INF--20210325	Analyzed by: Y7BM

**Total Dissolved Solids (TDS)**

**Prep Batch: 1317655 Analytical Batch: 1317659**

**Analysis Date: 04/01/2021**

202103250320	LH-INF-20210325	Analyzed by: TJ52
202103250337	MB-INF--20210325	Analyzed by: TJ52

**Total Suspended Solids (TSS)**

**Analytical Batch: 1318035**

**Analysis Date: 04/02/2021**

202103250320	LH-INF-20210325	Analyzed by: TJ52
202103250337	MB-INF--20210325	Analyzed by: TJ52

**ICP Metals**

**Prep Batch: 1316527 Analytical Batch: 1318038**

**Analysis Date: 04/02/2021**

202103250320	LH-INF-20210325	Analyzed by: Y7TT
202103250337	MB-INF--20210325	Analyzed by: Y7TT

**Volatile Organics by GCMS**

**Prep Batch: 1318057 Analytical Batch: 1318059**

**Analysis Date: 04/01/2021**

202103250320	LH-INF-20210325	Analyzed by: FX5E
202103250337	MB-INF--20210325	Analyzed by: FX5E

Water Replenishment District

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**Hexavalent chromium(Dissolved)****Analytical Batch: 1318079**

202103250337 MB-INF--20210325

**Analysis Date: 04/01/2021**

Analyzed by: TLH

**Hexavalent chromium(Dissolved)****Analytical Batch: 1318504**

202103250320 LH-INF-20210325

**Analysis Date: 04/05/2021**

Analyzed by: TLH

**Alkalinity in CaCO3 units****Analytical Batch: 1320231**

202103250320 LH-INF-20210325

**Analysis Date: 04/13/2021**

Analyzed by: ZS6I

**Alkalinity in CaCO3 units****Analytical Batch: 1320930**

202103250337 MB-INF--20210325

**Analysis Date: 04/14/2021**

Analyzed by: ZS6I

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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1316448</b>					<b>Analysis Date: 03/26/2021</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.50	mg/L	100	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.51	mg/L	100	(90-110)	20	0.40
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0489	mg/L	98	(50-150)		
MRLLW	Nitrate as Nitrogen by IC		0.013	0.0120	mg/L	96	(50-150)		
MS_202103250320	Nitrate as Nitrogen by IC	3.0	1.3	9.55	mg/L	105	(80-120)		
MS_202103250351	Nitrate as Nitrogen by IC		1.3	6.50	mg/L	104	(80-120)		
MSD_202103250320	Nitrate as Nitrogen by IC	3.0	1.3	9.59	mg/L	106	(80-120)	20	0.45
MSD_202103250351	Nitrate as Nitrogen by IC		1.3	6.59	mg/L	105	(80-120)	20	1.4
LCS1	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0473	mg/L	95	(50-150)		
MRLLW	Nitrite Nitrogen by IC		0.013	0.0114	mg/L	91	(50-150)		
MS_202103250320	Nitrite Nitrogen by IC	ND	0.5	2.61	mg/L	105	(80-120)		
MS_202103250351	Nitrite Nitrogen by IC		0.5	2.52	mg/L	101	(80-120)		
MSD_202103250320	Nitrite Nitrogen by IC	ND	0.5	2.64	mg/L	105	(80-120)	20	1
MSD_202103250351	Nitrite Nitrogen by IC		0.5	2.56	mg/L	102	(80-120)	20	1.5
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1316449</b>					<b>Analysis Date: 03/26/2021</b>				
LCS1	Chloride		25	26.0	mg/L	104	(90-110)		
LCS2	Chloride		25	26.0	mg/L	104	(90-110)	20	0.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.442	mg/L	89	(50-150)		
MS_202103250320	Chloride	110	13	174	mg/L	108	(80-120)		
MS_202103250351	Chloride		13	238	mg/L	99	(80-120)		
MSD_202103250320	Chloride	110	13	174	mg/L	108	(80-120)	20	0.23
MSD_202103250351	Chloride		13	239	mg/L	100	(80-120)	20	0.22
LCS1	Sulfate		50	51.5	mg/L	103	(90-110)		
LCS2	Sulfate		50	51.7	mg/L	103	(90-110)	20	0.39
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.979	mg/L	98	(50-150)		
MRLLW	Sulfate		0.25	0.240	mg/L	96	(50-150)		
MS_202103250320	Sulfate	160	25	299	mg/L	108	(80-120)		
MS_202103250351	Sulfate		25	350	mg/L	107	(80-120)		

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 925810  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202103250320	Sulfate	160	25	300	mg/L	108	(80-120)	20	0.23
MSD_202103250351	Sulfate		25	352	mg/L	108	(80-120)	20	0.54

ICPMS Metals by EPA 200.8

Analytical Batch: 1316698

Analysis Date: 03/26/2021

LCS1	Arsenic Total ICAP/MS		50	48.9	ug/L	98	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	48.6	ug/L	97	(85-115)	20	0.62
MBLK	Arsenic Total ICAP/MS			<u>0.343</u>	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.682	ug/L	68	(50-150)		
MS_202103240502	Arsenic Total ICAP/MS	ND	50	47.7	ug/L	95	(70-130)		
MS2_202103250320	Arsenic Total ICAP/MS	2.6	50	51.8	ug/L	98	(70-130)		
MSD_202103240502	Arsenic Total ICAP/MS	ND	50	52.8	ug/L	106	(70-130)	20	10
MSD2_202103250320	Arsenic Total ICAP/MS	2.6	50	54.1	ug/L	102	(70-130)	20	4.4
LCS1	Manganese Total ICAP/MS		100	99.1	ug/L	99	(85-115)		
LCS2	Manganese Total ICAP/MS		100	98.6	ug/L	99	(85-115)	20	0.51
MBLK	Manganese Total ICAP/MS			<0.333	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	1.97	ug/L	99	(50-150)		
MS_202103240502	Manganese Total ICAP/MS	16	100	111	ug/L	95	(70-130)		
MS2_202103250320	Manganese Total ICAP/MS	ND	100	94.0	ug/L	94	(70-130)		
MSD_202103240502	Manganese Total ICAP/MS	16	100	122	ug/L	106	(70-130)	20	9.2
MSD2_202103250320	Manganese Total ICAP/MS	ND	100	99.0	ug/L	99	(70-130)	20	5.2
LCS1	Uranium ICAP/MS		50	50.9	ug/L	102	(85-115)		
LCS2	Uranium ICAP/MS		50	50.4	ug/L	101	(85-115)	20	0.99
MBLK	Uranium ICAP/MS			<0.333	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.952	ug/L	95	(50-150)		
MS_202103240502	Uranium ICAP/MS	ND	50	47.5	ug/L	95	(70-130)		
MS2_202103250320	Uranium ICAP/MS	4.9	50	58.3	ug/L	107	(70-130)		
MSD_202103240502	Uranium ICAP/MS	ND	50	53.4	ug/L	107	(70-130)	20	12
MSD2_202103250320	Uranium ICAP/MS	4.9	50	59.1	ug/L	108	(70-130)	20	1.3

Perchlorate with 2 ug/L MRL by EPA 314.0

Analytical Batch: 1317011

Analysis Date: 03/26/2021

LCS1	Perchlorate- Low Level		10	10.8	ug/L	108	(85-115)		
LCS2	Perchlorate- Low Level		10	10.8	ug/L	108	(85-115)	15	0.0
MBLK	Perchlorate- Low Level			<1	ug/L				
MRL_CHK	Perchlorate- Low Level		2	1.88	ug/L	94	(75-125)		
MS2_202103240471	Perchlorate- Low Level	ND	10	9.82	ug/L	98	(80-120)		
MSD2_202103240471	Perchlorate- Low Level	ND	10	9.99	ug/L	100	(80-120)	15	1.7

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>EPA Method 537.1 by EPA 537.1</b>									
<b>Prep Batch: 1316762 Analytical Batch: 1317175</b>					<b>Analysis Date: 03/29/2021</b>				
DUP_202103250305	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0494	ug/L	105	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0504	ug/L	107	(70-130)	30	2.0
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00195	ug/L	104	(50-150)		
MS2_202103250304	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0496	ug/L	105	(70-130)		
DUP_202103250305	13C2-PFDA (S)			106	%	106	(70-130)		
LCS3	13C2-PFDA (S)		100	116	%	116	(70-130)		
LCS4	13C2-PFDA (S)		100	117	%	117	(70-130)		
MBLK	13C2-PFDA (S)			109	%	109	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	117	%	117	(70-130)		
MS2_202103250304	13C2-PFDA (S)		100	106	%	106	(70-130)		
DUP_202103250305	13C2-PFHxA (S)			115	%	115	(70-130)		
LCS3	13C2-PFHxA (S)		100	122	%	123	(70-130)		
LCS4	13C2-PFHxA (S)		100	125	%	125	(70-130)		
MBLK	13C2-PFHxA (S)			115	%	115	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	128	%	128	(70-130)		
MS2_202103250304	13C2-PFHxA (S)		100	115	%	115	(70-130)		
DUP_202103250305	13C2-PFOA- IS#1 (I)			115	%	115	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS2_202103250304	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
DUP_202103250305	13C3-HFPO-DA (S)			105	%	105	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	115	%	115	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	115	%	115	(70-130)		
MBLK	13C3-HFPO-DA (S)			110	%	110	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	119	%	119	(70-130)		
MS2_202103250304	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
DUP_202103250305	13C4-PFOS- IS#2 (I)			105	%	105	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202103250304	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
DUP_202103250305	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0503	ug/L	104	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0543	ug/L	112	(70-130)	30	7.7
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00214	ug/L	113	(50-150)		
MS2_202103250304	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0504	ug/L	104	(70-130)		
DUP_202103250305	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0524	ug/L	112	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0553	ug/L	119	(70-130)	30	5.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00206	ug/L	111	(50-150)		
MS2_202103250304	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0536	ug/L	115	(70-130)		
DUP_202103250305	d3-NMeFOSAA (I)			107	%	107	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MBLK	d3-NMeFOSAA (I)			100	%	100	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	108	%	109	(50-150)		
MS2_202103250304	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
DUP_202103250305	d5-NEtFOSAA (S)			115	%	115	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	118	%	118	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	117	%	117	(70-130)		
MBLK	d5-NEtFOSAA (S)			113	%	113	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	122	%	122	(70-130)		
MS2_202103250304	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
DUP_202103250305	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0538	ug/L	108	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0549	ug/L	110	(70-130)	30	2.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00212	ug/L	106	(50-150)		
MS2_202103250304	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0510	ug/L	102	(70-130)		
DUP_202103250305	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0534	ug/L	107	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0554	ug/L	111	(70-130)	30	3.7
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00206	ug/L	103	(50-150)		
MS2_202103250304	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0550	ug/L	110	(70-130)		
DUP_202103250305	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0513	ug/L	103	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0550	ug/L	110	(70-130)	30	7.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	106	(50-150)		
MS2_202103250304	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0553	ug/L	111	(70-130)		
DUP_202103250305	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0472	ug/L	107	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0495	ug/L	112	(70-130)	30	4.8
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00190	ug/L	107	(50-150)		
MS2_202103250304	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0491	ug/L	108	(70-130)		
DUP_202103250305	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0536	ug/L	107	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0559	ug/L	112	(70-130)	30	4.2
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00214	ug/L	107	(50-150)		
MS2_202103250304	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0516	ug/L	103	(70-130)		
DUP_202103250305	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0568	ug/L	114	(70-130)	30	8.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00207	ug/L	104	(50-150)		
MS2_202103250304	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0495	ug/L	99	(70-130)		
DUP_202103250305	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0540	ug/L	108	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0592	ug/L	118	(70-130)	30	9.2
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00233	ug/L	117	(50-150)		
MS2_202103250304	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0545	ug/L	108	(70-130)		
DUP_202103250305	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0503	ug/L	110	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0521	ug/L	114	(70-130)	30	3.5
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00203	ug/L	111	(50-150)		
MS2_202103250304	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0506	ug/L	110	(70-130)		
DUP_202103250305	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0570	ug/L	114	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0595	ug/L	119	(70-130)	30	4.1

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.



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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00233	ug/L	117	(50-150)		
MS2_202103250304	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0563	ug/L	109	(70-130)		
DUP_202103250305	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0551	ug/L	110	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0603	ug/L	121	(70-130)	30	9.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00233	ug/L	116	(50-150)		
MS2_202103250304	Perfluorononanoic acid (PFNA)	ND	0.05	0.0542	ug/L	108	(70-130)		
DUP_202103250305	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0516	ug/L	112	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0528	ug/L	114	(70-130)	30	2.3
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00205	ug/L	111	(50-150)		
MS2_202103250304	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0521	ug/L	112	(70-130)		
DUP_202103250305	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0561	ug/L	112	(70-130)	30	5.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00251	ug/L	126	(50-150)		
MS2_202103250304	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0571	ug/L	113	(70-130)		
DUP_202103250305	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0561	ug/L	112	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0608	ug/L	122	(70-130)	30	8.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00276	ug/L	138	(50-150)		
MS2_202103250304	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0550	ug/L	109	(70-130)		
DUP_202103250305	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0519	ug/L	104	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0552	ug/L	111	(70-130)	30	6.3
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00212	ug/L	106	(50-150)		
MS2_202103250304	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0495	ug/L	99	(70-130)		
DUP_202103250305	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0507	ug/L	101	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0560	ug/L	112	(70-130)	30	9.9
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00204	ug/L	102	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202103250304	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0482	ug/L	96	(70-130)		

**Dissolved Organic Carbon by SM 5310C**

Analytical Batch: 1317205

Analysis Date: 03/30/2021

LCS1	Dissolved Organic Carbon		5	5.36	mg/L	107	(90-110)		
LCS2	Dissolved Organic Carbon		5	5.43	mg/L	109	(90-110)	20	1.3
MBLK	Dissolved Organic Carbon			<0.10	mg/L				
MRL_CHK	Dissolved Organic Carbon		0.2	0.225	mg/L	113	(50-150)		
MS_202103310128	Dissolved Organic Carbon	0.32	4	4.68	mg/L	109	(80-120)		
MSD_202103310128	Dissolved Organic Carbon	0.32	4	4.71	mg/L	110	(80-120)	20	0.53

**ICPMS Metals by EPA 200.8**

Analytical Batch: 1317344

Analysis Date: 03/30/2021

LCS1	Arsenic Total ICAP/MS		50	46.4	ug/L	93	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	48.1	ug/L	96	(85-115)	20	3.4
MBLK	Arsenic Total ICAP/MS			<0.333	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.22	ug/L	122	(50-150)		
MS_202103180628	Arsenic Total ICAP/MS	ND	50	51.2	ug/L	102	(70-130)		
MS2_202103260068	Arsenic Total ICAP/MS	ND	50	47.4	ug/L	94	(70-130)		
MSD_202103180628	Arsenic Total ICAP/MS	ND	50	50.2	ug/L	100	(70-130)	20	2.0
MSD2_202103260068	Arsenic Total ICAP/MS	ND	50	51.6	ug/L	102	(70-130)	20	8.5
LCS1	Manganese Total ICAP/MS		100	102	ug/L	102	(85-115)		
LCS2	Manganese Total ICAP/MS		100	102	ug/L	102	(85-115)	20	0.0
MBLK	Manganese Total ICAP/MS			<0.333	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	1.93	ug/L	97	(50-150)		
MS_202103180628	Manganese Total ICAP/MS	31	100	130	ug/L	130	(70-130)		
MS2_202103260068	Manganese Total ICAP/MS	ND	100	94.7	ug/L	95	(70-130)		
MSD_202103180628	Manganese Total ICAP/MS	31	100	129	ug/L	129	(70-130)	20	1.1
MSD2_202103260068	Manganese Total ICAP/MS	ND	100	104	ug/L	104	(70-130)	20	9.3
LCS1	Uranium ICAP/MS		50	51.4	ug/L	103	(85-115)		
LCS2	Uranium ICAP/MS		50	52.0	ug/L	104	(85-115)	20	1.2
MBLK	Uranium ICAP/MS			<0.333	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.930	ug/L	93	(50-150)		
MS_202103180628	Uranium ICAP/MS	ND	50	56.0	ug/L	112	(70-130)		
MS2_202103260068	Uranium ICAP/MS	ND	50	51.4	ug/L	102	(70-130)		
MSD_202103180628	Uranium ICAP/MS	ND	50	54.3	ug/L	109	(70-130)	20	3.1
MSD2_202103260068	Uranium ICAP/MS	ND	50	55.7	ug/L	111	(70-130)	20	8.0

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 925810  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Total Organic Carbon by SM 5310C</b>									
<b>Analytical Batch: 1317581</b>					<b>Analysis Date: 03/31/2021</b>				
LCS1	Total Organic Carbon		5	5.11	mg/L	102	(90-110)		
LCS2	Total Organic Carbon		5	5.08	mg/L	102	(90-110)	20	0.59
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.264	mg/L	132	(50-150)		
MS_202103250366	Total Organic Carbon	1.1	4	5.05	mg/L	99	(80-120)		
MS2_202103260267	Total Organic Carbon	1.8	2	3.71	mg/L	95	(80-120)		
MSD_202103250366	Total Organic Carbon	1.1	4	5.08	mg/L	100	(80-120)	20	0.65
MSD2_202103260267	Total Organic Carbon	1.8	2	3.71	mg/L	95	(80-120)	20	0.054

**EPA Method 537.1 by EPA 537.1**

**Prep Batch: 1316897 Analytical Batch: 1317597**

**Analysis Date: 03/30/2021**

DUP_202103250316	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0256	ug/L	109	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0257	ug/L	109	(70-130)	30	0.39
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00183	ug/L	97	(50-150)		
MS1_202103250315	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0265	ug/L	112	(70-130)		
DUP_202103250316	13C2-PFDA (S)			93.6	%	94	(70-130)		
LCS1	13C2-PFDA (S)		100	90.9	%	91	(70-130)		
LCS2	13C2-PFDA (S)		100	94.6	%	95	(70-130)		
MBLK	13C2-PFDA (S)			97.4	%	97	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	91.8	%	92	(70-130)		
MS1_202103250315	13C2-PFDA (S)		100	93.8	%	94	(70-130)		
DUP_202103250316	13C2-PFHxA (S)			98.0	%	98	(70-130)		
LCS1	13C2-PFHxA (S)		100	99.1	%	99	(70-130)		
LCS2	13C2-PFHxA (S)		100	97.4	%	97	(70-130)		
MBLK	13C2-PFHxA (S)			97.2	%	97	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	97.3	%	97	(70-130)		
MS1_202103250315	13C2-PFHxA (S)		100	102	%	103	(70-130)		
DUP_202103250316	13C2-PFOA- IS#1 (I)			104	%	104	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	99.4	%	99	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			105	%	105	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
MS1_202103250315	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
DUP_202103250316	13C3-HFPO-DA (S)			94.9	%	95	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	13C3-HFPO-DA (S)		100	95.5	%	95	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	96.9	%	97	(70-130)		
MBLK	13C3-HFPO-DA (S)			96.5	%	97	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	97.3	%	97	(70-130)		
MS1_202103250315	13C3-HFPO-DA (S)		100	97.4	%	97	(70-130)		
DUP_202103250316	13C4-PFOS- IS#2 (I)			102	%	103	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	99.5	%	99	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	99.1	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MS1_202103250315	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
DUP_202103250316	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0278	ug/L	118	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0276	ug/L	117	(70-130)	30	1.1
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00212	ug/L	112	(50-150)		
MS1_202103250315	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0293	ug/L	124	(70-130)		
DUP_202103250316	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0269	ug/L	115	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0260	ug/L	111	(70-130)	30	3.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00205	ug/L	110	(50-150)		
MS1_202103250315	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0260	ug/L	112	(70-130)		
DUP_202103250316	d3-NMeFOSAA (I)			98.9	%	99	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	98.2	%	98	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	96.1	%	96	(50-150)		
MBLK	d3-NMeFOSAA (I)			94.6	%	95	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
MS1_202103250315	d3-NMeFOSAA (I)		100	97.2	%	97	(50-150)		
DUP_202103250316	d5-NEtFOSAA (S)			93.4	%	93	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	92.9	%	93	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	92.7	%	93	(70-130)		
MBLK	d5-NEtFOSAA (S)			95.6	%	96	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	92.9	%	93	(70-130)		
MS1_202103250315	d5-NEtFOSAA (S)		100	93.2	%	93	(70-130)		
DUP_202103250316	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0279	ug/L	112	(70-130)	30	1.4

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00220	ug/L	110	(50-150)		
MS1_202103250315	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0294	ug/L	118	(70-130)		
DUP_202103250316	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0279	ug/L	112	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0282	ug/L	113	(70-130)	30	1.1
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	105	(50-150)		
MS1_202103250315	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0287	ug/L	115	(70-130)		
DUP_202103250316	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0287	ug/L	115	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0287	ug/L	115	(70-130)	30	0.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00216	ug/L	108	(50-150)		
MS1_202103250315	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0287	ug/L	115	(70-130)		
DUP_202103250316	Perfluorobutanesulfonic acid (PFBS)	0.0022		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0253	ug/L	114	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0249	ug/L	113	(70-130)	30	1.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00202	ug/L	114	(50-150)		
MS1_202103250315	Perfluorobutanesulfonic acid (PFBS)	0.0026	0.022	0.0287	ug/L	118	(70-130)		
DUP_202103250316	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0281	ug/L	113	(70-130)	30	0.71
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00225	ug/L	113	(50-150)		
MS1_202103250315	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0301	ug/L	120	(70-130)		
DUP_202103250316	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0284	ug/L	113	(70-130)	30	2.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00205	ug/L	102	(50-150)		
MS1_202103250315	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0288	ug/L	115	(70-130)		
DUP_202103250316	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0298	ug/L	119	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0290	ug/L	116	(70-130)	30	2.7
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00233	ug/L	116	(50-150)		

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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202103250315	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0305	ug/L	120	(70-130)		
DUP_202103250316	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0272	ug/L	119	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0267	ug/L	117	(70-130)	30	1.9
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00216	ug/L	119	(50-150)		
MS1_202103250315	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0283	ug/L	118	(70-130)		
DUP_202103250316	Perfluorohexanoic acid (PFHxA)	0.0031		0.00288	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0312	ug/L	125	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0305	ug/L	122	(70-130)	30	2.3
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00236	ug/L	118	(50-150)		
MS1_202103250315	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0329	ug/L	124	(70-130)		
DUP_202103250316	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0301	ug/L	120	(70-130)	30	3.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00240	ug/L	120	(50-150)		
MS1_202103250315	Perfluorononanoic acid (PFNA)	ND	0.025	0.0312	ug/L	123	(70-130)		
DUP_202103250316	Perfluorooctanesulfonic acid (PFOS)	0.0053		0.00448	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0268	ug/L	116	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0266	ug/L	115	(70-130)	30	0.75
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00215	ug/L	116	(50-150)		
MS1_202103250315	Perfluorooctanesulfonic acid (PFOS)	0.0036	0.023	0.0302	ug/L	115	(70-130)		
DUP_202103250316	Perfluorooctanoic acid (PFOA)	0.0074		0.00669	ug/L		(0-30)	30	11
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0283	ug/L	113	(70-130)	30	3.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00244	ug/L	122	(50-150)		
MS1_202103250315	Perfluorooctanoic acid (PFOA)	0.0032	0.025	0.0329	ug/L	119	(70-130)		
DUP_202103250316	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0287	ug/L	115	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0279	ug/L	112	(70-130)	30	2.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00246	ug/L	123	(50-150)		
MS1_202103250315	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0300	ug/L	118	(70-130)		
DUP_202103250316	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0267	ug/L	107	(70-130)	30	0.38
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00196	ug/L	98	(50-150)		
MS1_202103250315	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0271	ug/L	109	(70-130)		
DUP_202103250316	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0265	ug/L	106	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0268	ug/L	107	(70-130)	30	1.1
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00198	ug/L	99	(50-150)		
MS1_202103250315	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0276	ug/L	110	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1316910 Analytical Batch: 1317598

Analysis Date: 03/30/2021

DUP_202103250412	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0474	ug/L	101	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0477	ug/L	101	(70-130)	30	0.63
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00201	ug/L	107	(50-150)		
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00208	ug/L	111	(50-150)		
MS2_202103250410	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0458	ug/L	97	(70-130)		
DUP_202103250412	13C2-PFDA (S)			93.3	%	93	(70-130)		
LCS3	13C2-PFDA (S)		100	98.1	%	98	(70-130)		
LCS4	13C2-PFDA (S)		100	95.0	%	95	(70-130)		
MBLK	13C2-PFDA (S)			97.9	%	98	(70-130)		
MBLK	13C2-PFDA (S)			94.3	%	94	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	93.7	%	94	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	92.0	%	92	(70-130)		
MS2_202103250410	13C2-PFDA (S)		100	92.6	%	93	(70-130)		
DUP_202103250412	13C2-PFHxA (S)			101	%	101	(70-130)		
LCS3	13C2-PFHxA (S)		100	101	%	101	(70-130)		
LCS4	13C2-PFHxA (S)		100	99.5	%	100	(70-130)		
MBLK	13C2-PFHxA (S)			97.0	%	97	(70-130)		
MBLK	13C2-PFHxA (S)			96.1	%	96	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	95.0	%	95	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	95.7	%	96	(70-130)		
MS2_202103250410	13C2-PFHxA (S)		100	98.0	%	98	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202103250412	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	102	%	103	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			104	%	104	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			106	%	106	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS2_202103250410	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
DUP_202103250412	13C3-HFPO-DA (S)			94.4	%	94	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	95.5	%	96	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	94.4	%	94	(70-130)		
MBLK	13C3-HFPO-DA (S)			95.2	%	95	(70-130)		
MBLK	13C3-HFPO-DA (S)			90.9	%	91	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	90.7	%	91	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	91.5	%	92	(70-130)		
MS2_202103250410	13C3-HFPO-DA (S)		100	92.4	%	92	(70-130)		
DUP_202103250412	13C4-PFOS- IS#2 (I)			100	%	100	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	98.5	%	99	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	98.9	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			99.3	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	97.8	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.2	%	98	(50-150)		
MS2_202103250410	13C4-PFOS- IS#2 (I)		100	99.2	%	99	(50-150)		
DUP_202103250412	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0505	ug/L	104	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0510	ug/L	105	(70-130)	30	0.99
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00214	ug/L	113	(50-150)		
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00212	ug/L	112	(50-150)		
MS2_202103250410	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0482	ug/L	99	(70-130)		
DUP_202103250412	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0483	ug/L	104	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0493	ug/L	106	(70-130)	30	2.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00218	ug/L	117	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00216	ug/L	116	(50-150)		
MS2_202103250410	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0476	ug/L	102	(70-130)		
DUP_202103250412	d3-NMeFOSAA (I)			104	%	104	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	99.6	%	100	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MBLK	d3-NMeFOSAA (I)			98.9	%	99	(50-150)		
MBLK	d3-NMeFOSAA (I)			103	%	103	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MS2_202103250410	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
DUP_202103250412	d5-NEtFOSAA (S)			92.4	%	92	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	95.0	%	95	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	88.4	%	88	(70-130)		
MBLK	d5-NEtFOSAA (S)			93.8	%	94	(70-130)		
MBLK	d5-NEtFOSAA (S)			92.7	%	93	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	93.9	%	94	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	89.8	%	90	(70-130)		
MS2_202103250410	d5-NEtFOSAA (S)		100	88.0	%	88	(70-130)		
DUP_202103250412	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0510	ug/L	102	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0497	ug/L	99	(70-130)	30	2.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00219	ug/L	109	(50-150)		
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00216	ug/L	108	(50-150)		
MS2_202103250410	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0486	ug/L	97	(70-130)		
DUP_202103250412	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0525	ug/L	105	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0516	ug/L	103	(70-130)	30	1.7
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00231	ug/L	116	(50-150)		
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00222	ug/L	111	(50-150)		
MS2_202103250410	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0499	ug/L	100	(70-130)		
DUP_202103250412	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0525	ug/L	105	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0523	ug/L	105	(70-130)	30	0.38
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00229	ug/L	115	(50-150)		
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00227	ug/L	114	(50-150)		
MS2_202103250410	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0492	ug/L	99	(70-130)		
DUP_202103250412	Perfluorobutanesulfonic acid (PFBS)	0.0028		0.00288	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0463	ug/L	105	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0471	ug/L	106	(70-130)	30	1.7
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00215	ug/L	121	(50-150)		
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00217	ug/L	123	(50-150)		
MS2_202103250410	Perfluorobutanesulfonic acid (PFBS)	0.0024	0.044	0.0470	ug/L	101	(70-130)		
DUP_202103250412	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0521	ug/L	104	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0528	ug/L	106	(70-130)	30	1.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00243	ug/L	121	(50-150)		
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00229	ug/L	114	(50-150)		
MS2_202103250410	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0510	ug/L	102	(70-130)		
DUP_202103250412	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0502	ug/L	100	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0489	ug/L	98	(70-130)	30	2.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00208	ug/L	104	(50-150)		
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00194	ug/L	97	(50-150)		
MS2_202103250410	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0478	ug/L	96	(70-130)		
DUP_202103250412	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0530	ug/L	106	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0529	ug/L	106	(70-130)	30	0.19
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00228	ug/L	114	(50-150)		
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00244	ug/L	122	(50-150)		
MS2_202103250410	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0528	ug/L	105	(70-130)		
DUP_202103250412	Perfluorohexanesulfonic acid (PFHxS)	0.0022		0.00215	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0498	ug/L	109	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0506	ug/L	111	(70-130)	30	1.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00220	ug/L	120	(50-150)		
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00222	ug/L	122	(50-150)		
MS2_202103250410	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0502	ug/L	108	(70-130)		
DUP_202103250412	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0541	ug/L	108	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0562	ug/L	112	(70-130)	30	3.8
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00240	ug/L	120	(50-150)		
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00240	ug/L	120	(50-150)		
MS2_202103250410	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0544	ug/L	107	(70-130)		
DUP_202103250412	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0559	ug/L	112	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0553	ug/L	111	(70-130)	30	1.1
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00251	ug/L	125	(50-150)		
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00245	ug/L	123	(50-150)		
MS2_202103250410	Perfluorononanoic acid (PFNA)	ND	0.05	0.0525	ug/L	105	(70-130)		
DUP_202103250412	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0492	ug/L	106	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0510	ug/L	110	(70-130)	30	3.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00227	ug/L	123	(50-150)		
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00227	ug/L	123	(50-150)		
MS2_202103250410	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0502	ug/L	105	(70-130)		
DUP_202103250412	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0525	ug/L	105	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0530	ug/L	106	(70-130)	30	0.95
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00250	ug/L	125	(50-150)		
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00259	ug/L	130	(50-150)		
MS2_202103250410	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0519	ug/L	102	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202103250412	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0486	ug/L	97	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0480	ug/L	96	(70-130)	30	1.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00244	ug/L	122	(50-150)		
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00188	ug/L	94	(50-150)		
MS2_202103250410	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0472	ug/L	94	(70-130)		
DUP_202103250412	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0471	ug/L	94	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0462	ug/L	92	(70-130)	30	1.9
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00199	ug/L	100	(50-150)		
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00192	ug/L	96	(50-150)		
MS2_202103250410	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0425	ug/L	85	(70-130)		
DUP_202103250412	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0489	ug/L	98	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0486	ug/L	97	(70-130)	30	0.41
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00217	ug/L	109	(50-150)		
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00214	ug/L	107	(50-150)		
MS2_202103250410	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0470	ug/L	94	(70-130)		

Total Dissolved Solids (TDS) by E160.1/SM2540C

Analytical Batch: 1317659

Analysis Date: 04/01/2021

DUP_202103250157	Total Dissolved Solid (TDS)	300		284	mg/L		(0-10)	10	4.1
DUP_202103250366	Total Dissolved Solid (TDS)	570		564	mg/L		(0-10)	10	0.35
LCS1	Total Dissolved Solid (TDS)		175	174	mg/L	99	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	706	mg/L	101	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	13.0	mg/L	130	(50-150)		

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1318035

Analysis Date: 04/02/2021

DUP_202102170021	Total Suspended Solids (TSS)	94		96.0	mg/L		(0-10)	10	2.1
DUP_202102170042	Total Suspended Solids (TSS)	150		252	mg/L		(0-10)	10	<u>17</u>
LCS1	Total Suspended Solids (TSS)		175	174	mg/L	99	(71-107)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Total Suspended Solids (TSS)		175	168	mg/L	96	(71-107)	20	3.5
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	11.0	mg/L	110	(50-150)		

ICP Metals by EPA 200.7

Analytical Batch: 1318038

Analysis Date: 04/02/2021

LCS1	Calcium Total ICAP		50	51.1	mg/L	102	(85-115)		
LCS2	Calcium Total ICAP		50	51.1	mg/L	102	(85-115)	20	0.0
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	1.11	mg/L	111	(50-150)		
MS_202103250146	Calcium Total ICAP	110	50	158	mg/L	90	(70-130)		
MS2_202103240323	Calcium Total ICAP	36	50	83.9	mg/L	97	(70-130)		
MSD_202103250146	Calcium Total ICAP	110	50	158	mg/L	88	(70-130)	20	0.21
MSD2_202103240323	Calcium Total ICAP	36	50	84.3	mg/L	97	(70-130)	20	0.45
LCS1	Iron Total ICAP		5	5.12	mg/L	102	(85-115)		
LCS2	Iron Total ICAP		5	5.12	mg/L	102	(85-115)	20	0.0
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.01	0.0114	mg/L	114	(50-150)		
MS_202103250146	Iron Total ICAP	0.014	5	5.09	mg/L	102	(70-130)		
MS2_202103240323	Iron Total ICAP	0.49	5	5.54	mg/L	101	(70-130)		
MSD_202103250146	Iron Total ICAP	0.014	5	5.11	mg/L	102	(70-130)	20	0.36
MSD2_202103240323	Iron Total ICAP	0.49	5	5.56	mg/L	101	(70-130)	20	0.25
LCS1	Magnesium Total ICAP		20	20.3	mg/L	101	(85-115)		
LCS2	Magnesium Total ICAP		20	20.3	mg/L	101	(85-115)	20	0.0
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.107	mg/L	107	(50-150)		
MS_202103250146	Magnesium Total ICAP	41	20	59.6	mg/L	94	(70-130)		
MS2_202103240323	Magnesium Total ICAP	13	20	32.7	mg/L	100	(70-130)		
MSD_202103250146	Magnesium Total ICAP	41	20	59.9	mg/L	96	(70-130)	20	0.49
MSD2_202103240323	Magnesium Total ICAP	13	20	32.8	mg/L	100	(70-130)	20	0.16
LCS1	Potassium Total ICAP		20	20.1	mg/L	101	(85-115)		
LCS2	Potassium Total ICAP		20	20.1	mg/L	101	(85-115)	20	0.0
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.701	mg/L	70	(50-150)		
MS_202103250146	Potassium Total ICAP	1.6	20	24.0	mg/L	112	(70-130)		
MS2_202103240323	Potassium Total ICAP	5.8	20	27.6	mg/L	109	(70-130)		
MSD_202103250146	Potassium Total ICAP	1.6	20	24.1	mg/L	112	(70-130)	20	0.43
MSD2_202103240323	Potassium Total ICAP	5.8	20	27.6	mg/L	109	(70-130)	20	0.14

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 925810  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Sodium Total ICAP		50	50.1	mg/L	100	(85-115)		
LCS2	Sodium Total ICAP		50	50.0	mg/L	100	(85-115)	20	0.20
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	1.15	mg/L	115	(50-150)		
MS_202103250146	Sodium Total ICAP	130	50	170	mg/L	82	(70-130)		
MS2_202103240323	Sodium Total ICAP	150	50	188	mg/L	82	(70-130)		
MSD_202103250146	Sodium Total ICAP	130	50	171	mg/L	83	(70-130)	20	0.31
MSD2_202103240323	Sodium Total ICAP	150	50	187	mg/L	81	(70-130)	20	0.30

**Volatile Organics by GCMS by EPA 524.2**  
**Analytical Batch: 1318059**

Analysis Date: 04/01/2021

LCS1	1,1,1,2-Tetrachloroethane		5	5.42	ug/L	108	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	5.31	ug/L	106	(70-130)	20	2.0
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.660	ug/L	132	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.49	ug/L	90	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.41	ug/L	88	(70-130)	20	1.8
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.19	ug/L	104	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	5.10	ug/L	102	(70-130)	20	1.8
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,1,2-Trichloroethane		5	5.30	ug/L	106	(70-130)		
LCS2	1,1,2-Trichloroethane		5	5.32	ug/L	106	(70-130)	20	0.38
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,1-Dichloroethane		5	4.84	ug/L	97	(70-130)		
LCS2	1,1-Dichloroethane		5	4.78	ug/L	96	(70-130)	20	1.3
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,1-Dichloroethylene		5	4.21	ug/L	84	(70-130)		
LCS2	1,1-Dichloroethylene		5	4.34	ug/L	87	(70-130)	20	3.0
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.590	ug/L	118	(50-150)		
LCS1	1,1-Dichloropropene		5	4.47	ug/L	89	(70-130)		
LCS2	1,1-Dichloropropene		5	4.41	ug/L	88	(70-130)	20	1.4
MBLK	1,1-Dichloropropene			<0.5	ug/L				

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 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	1,1-Dichloropropene		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	5.15	ug/L	103	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	5.14	ug/L	103	(70-130)	20	0.19
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.620	ug/L	124	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.23	ug/L	105	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.20	ug/L	104	(70-130)	20	0.57
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	5.07	ug/L	101	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	5.19	ug/L	104	(70-130)	20	2.3
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.670	ug/L	134	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	5.07	ug/L	101	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	5.00	ug/L	100	(70-130)	20	1.4
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,2-Dichloroethane		5	5.25	ug/L	105	(70-130)		
LCS2	1,2-Dichloroethane		5	5.28	ug/L	106	(70-130)	20	0.57
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	99.0	%	99	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			100	%	100	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	105	%	105	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	100	%	100	(70-130)		
LCS1	1,2-Dichloropropane		5	5.21	ug/L	104	(70-130)		
LCS2	1,2-Dichloropropane		5	5.11	ug/L	102	(70-130)	20	1.9
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.94	ug/L	99	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.97	ug/L	99	(70-130)	20	0.61
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,3-Dichloropropane		5	5.40	ug/L	108	(70-130)		
LCS2	1,3-Dichloropropane		5	5.27	ug/L	105	(70-130)	20	2.4
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.510	ug/L	102	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	2,2-Dichloropropane		5	4.47	ug/L	89	(70-130)		
LCS2	2,2-Dichloropropane		5	4.38	ug/L	88	(70-130)	20	2.0
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.450	ug/L	90	(50-150)		
LCS1	2-Butanone (MEK)		50	54.5	ug/L	109	(70-130)		
LCS2	2-Butanone (MEK)		50	52.4	ug/L	105	(70-130)	20	3.9
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.07	ug/L	101	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	97.4	%	97	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	99.6	%	100	(70-130)		
MBLK	4-Bromofluorobenzene (S)			99.6	%	100	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	99.8	%	100	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	98.0	%	98	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	53.7	ug/L	107	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	53.7	ug/L	107	(70-130)	20	0.0
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	5.12	ug/L	102	(50-150)		
LCS1	Benzene		5	5.07	ug/L	101	(70-130)		
LCS2	Benzene		5	4.97	ug/L	99	(70-130)	20	2.0
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.520	ug/L	104	(50-150)		
LCS1	Bromobenzene		5	5.09	ug/L	102	(70-130)		
LCS2	Bromobenzene		5	5.25	ug/L	105	(70-130)	20	3.1
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.540	ug/L	108	(50-150)		
LCS1	Bromochloromethane		5	5.19	ug/L	104	(70-130)		
LCS2	Bromochloromethane		5	5.24	ug/L	105	(70-130)	20	0.96
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	Bromodichloromethane		5	5.38	ug/L	108	(70-130)		
LCS2	Bromodichloromethane		5	5.42	ug/L	108	(70-130)	20	0.74
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.660	ug/L	132	(50-150)		
LCS1	Bromoethane		5	4.86	ug/L	97	(70-130)		
LCS2	Bromoethane		5	4.79	ug/L	96	(70-130)	20	1.5
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	Bromoform		5	5.80	ug/L	116	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Bromoform		5	5.61	ug/L	112	(70-130)	20	3.3
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.860	ug/L	<u>172</u>	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	4.66	ug/L	93	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	4.51	ug/L	90	(70-130)	20	3.3
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.570	ug/L	114	(50-150)		
LCS1	Carbon disulfide		5	4.34	ug/L	87	(70-130)		
LCS2	Carbon disulfide		5	4.26	ug/L	85	(70-130)	20	1.9
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.540	ug/L	108	(50-150)		
LCS1	Carbon Tetrachloride		5	4.18	ug/L	84	(70-130)		
LCS2	Carbon Tetrachloride		5	4.10	ug/L	82	(70-130)	20	1.9
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.770	ug/L	<u>154</u>	(50-150)		
LCS1	Chlorobenzene		5	5.18	ug/L	104	(70-130)		
LCS2	Chlorobenzene		5	5.09	ug/L	102	(70-130)	20	1.8
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	Chlorodibromomethane		5	6.12	ug/L	122	(70-130)		
LCS2	Chlorodibromomethane		5	6.13	ug/L	123	(70-130)	20	0.16
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.690	ug/L	138	(50-150)		
LCS1	Chloroethane		5	4.39	ug/L	88	(70-130)		
LCS2	Chloroethane		5	4.37	ug/L	87	(70-130)	20	0.46
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	5.16	ug/L	103	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	5.08	ug/L	102	(70-130)	20	1.6
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.560	ug/L	112	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.73	ug/L	95	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.71	ug/L	94	(70-130)	20	0.42
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.420	ug/L	84	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.87	ug/L	97	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	5.09	ug/L	102	(70-130)	20	4.4
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.560	ug/L	112	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	5.88	ug/L	118	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	5.82	ug/L	116	(70-130)	20	1.0
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.670	ug/L	134	(50-150)		
LCS1	Dibromomethane		5	5.16	ug/L	103	(70-130)		
LCS2	Dibromomethane		5	5.10	ug/L	102	(70-130)	20	1.2
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	Dichlorodifluoromethane		5	3.72	ug/L	74	(70-130)		
LCS2	Dichlorodifluoromethane		5	3.61	ug/L	72	(70-130)	20	3.0
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.500	ug/L	100	(50-150)		
LCS1	Dichloromethane		5	5.07	ug/L	101	(70-130)		
LCS2	Dichloromethane		5	4.96	ug/L	99	(70-130)	20	2.2
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	Di-isopropyl ether		5	5.12	ug/L	102	(70-130)		
LCS2	Di-isopropyl ether		5	5.02	ug/L	100	(70-130)	20	2.0
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.490	ug/L	98	(50-150)		
LCS1	Ethyl benzene		5	5.15	ug/L	103	(70-130)		
LCS2	Ethyl benzene		5	4.98	ug/L	100	(70-130)	20	3.4
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.490	ug/L	98	(50-150)		
LCS1	Hexachlorobutadiene		5	4.60	ug/L	92	(70-130)		
LCS2	Hexachlorobutadiene		5	4.73	ug/L	95	(70-130)	20	2.8
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.570	ug/L	114	(50-150)		
LCS1	Isopropylbenzene		5	4.74	ug/L	95	(70-130)		
LCS2	Isopropylbenzene		5	4.72	ug/L	94	(70-130)	20	0.42
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	m,p-Xylenes		10	10.4	ug/L	104	(70-130)		
LCS2	m,p-Xylenes		10	10.2	ug/L	102	(70-130)	20	1.9
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	1.01	ug/L	101	(50-150)		
MRLW	m,p-Xylenes		0.5	0.500	ug/L	100	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.97	ug/L	99	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	5.03	ug/L	101	(70-130)	20	1.2
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.550	ug/L	110	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	5.12	ug/L	102	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	5.21	ug/L	104	(70-130)	20	1.7
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.560	ug/L	112	(50-150)		
LCS1	Naphthalene		5	5.17	ug/L	103	(70-130)		
LCS2	Naphthalene		5	5.21	ug/L	104	(70-130)	20	0.77
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.600	ug/L	120	(50-150)		
LCS1	n-Butylbenzene		5	4.84	ug/L	97	(70-130)		
LCS2	n-Butylbenzene		5	4.89	ug/L	98	(70-130)	20	1.0
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.540	ug/L	108	(50-150)		
LCS1	n-Propylbenzene		5	4.64	ug/L	93	(70-130)		
LCS2	n-Propylbenzene		5	4.74	ug/L	95	(70-130)	20	2.1
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	o-Chlorotoluene		5	4.96	ug/L	99	(70-130)		
LCS2	o-Chlorotoluene		5	4.91	ug/L	98	(70-130)	20	1.0
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.580	ug/L	116	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	5.31	ug/L	106	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	5.12	ug/L	102	(70-130)	20	3.6
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.570	ug/L	114	(50-150)		
LCS1	o-Xylene		5	5.10	ug/L	102	(70-130)		
LCS2	o-Xylene		5	4.88	ug/L	98	(70-130)	20	4.4
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.540	ug/L	108	(50-150)		
LCS1	p-Chlorotoluene		5	5.14	ug/L	103	(70-130)		
LCS2	p-Chlorotoluene		5	5.13	ug/L	103	(70-130)	20	0.20
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.550	ug/L	110	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	5.03	ug/L	101	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.07	ug/L	101	(70-130)	20	0.79

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.520	ug/L	104	(50-150)		
LCS1	p-Isopropyltoluene		5	4.86	ug/L	97	(70-130)		
LCS2	p-Isopropyltoluene		5	4.91	ug/L	98	(70-130)	20	1.0
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.490	ug/L	98	(50-150)		
LCS1	sec-Butylbenzene		5	4.78	ug/L	96	(70-130)		
LCS2	sec-Butylbenzene		5	4.88	ug/L	98	(70-130)	20	2.1
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.460	ug/L	92	(50-150)		
LCS1	Styrene		5	5.29	ug/L	106	(70-130)		
LCS2	Styrene		5	5.07	ug/L	101	(70-130)	20	4.3
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.500	ug/L	100	(50-150)		
LCS1	tert-amyl Methyl Ether		5	5.14	ug/L	103	(70-130)		
LCS2	tert-amyl Methyl Ether		5	5.15	ug/L	103	(70-130)	20	0.19
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.510	ug/L	102	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	5.19	ug/L	104	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	5.15	ug/L	103	(70-130)	20	0.77
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.540	ug/L	108	(50-150)		
LCS1	tert-Butylbenzene		5	4.78	ug/L	96	(70-130)		
LCS2	tert-Butylbenzene		5	4.80	ug/L	96	(70-130)	20	0.42
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.63	ug/L	93	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.55	ug/L	91	(70-130)	20	1.7
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.460	ug/L	92	(50-150)		
LCS1	Toluene		5	5.07	ug/L	101	(70-130)		
LCS2	Toluene		5	4.99	ug/L	100	(70-130)	20	1.6
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.510	ug/L	102	(50-150)		
LCS1	Toluene-d8 (S)		5	103	%	103	(70-130)		
LCS2	Toluene-d8 (S)		5	102	%	102	(70-130)		
MBLK	Toluene-d8 (S)			96.6	%	97	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	96.0	%	96	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRLW	Toluene-d8 (S)		5	97.0	%	97	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.84	ug/L	97	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	4.90	ug/L	98	(70-130)	20	1.2
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.550	ug/L	110	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	6.17	ug/L	123	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	6.02	ug/L	120	(70-130)	20	2.5
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.650	ug/L	130	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.91	ug/L	98	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.79	ug/L	96	(70-130)	20	2.5
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.490	ug/L	98	(50-150)		
LCS1	Trichlorofluoromethane		5	3.93	ug/L	79	(70-130)		
LCS2	Trichlorofluoromethane		5	3.97	ug/L	79	(70-130)	20	1.0
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	3.71	ug/L	74	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	3.54	ug/L	71	(70-130)	20	4.7
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.10	ug/L	82	(70-130)		
LCS2	Vinyl chloride (VC)		5	4.23	ug/L	85	(70-130)	20	3.1
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.570	ug/L	114	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.260	ug/L	104	(50-150)		

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1318079

Analysis Date: 04/01/2021

LCS1	Hexavalent chromium(Dissolved)		2	2.00	ug/L	100	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	2.00	ug/L	100	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0179	ug/L	90	(50-150)		
MS_202103250337	Hexavalent chromium(Dissolved)	0.46	2	2.47	ug/L	100	(90-110)		
MS_202103250382	Hexavalent chromium(Dissolved)	0.064	2	2.19	ug/L	106	(90-110)		
MSD_202103250337	Hexavalent chromium(Dissolved)	0.46	2	2.60	ug/L	107	(90-110)	20	5.1
MSD_202103250382	Hexavalent chromium(Dissolved)	0.064	2	2.22	ug/L	108	(90-110)	20	1.2

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 925810  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Hexavalent chromium(Dissolved) by EPA 218.6</b>									
<b>Analytical Batch: 1318504</b>					<b>Analysis Date: 04/05/2021</b>				
LCS1	Hexavalent chromium(Dissolved)		2	1.99	ug/L	100	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.99	ug/L	100	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0176	ug/L	88	(50-150)		
MS_202103250320	Hexavalent chromium(Dissolved)	0.86	2	2.93	ug/L	104	(90-110)		
MS_202104020404	Hexavalent chromium(Dissolved)	0.063	2	2.16	ug/L	105	(90-110)		
MSD_202103250320	Hexavalent chromium(Dissolved)	0.86	2	2.96	ug/L	105	(90-110)	20	1
MSD_202104020404	Hexavalent chromium(Dissolved)	0.063	2	2.17	ug/L	106	(90-110)	20	0.21
<b>Alkalinity in CaCO3 units by SM 2320B</b>									
<b>Analytical Batch: 1320231</b>					<b>Analysis Date: 04/12/2021</b>				
LCS1	Alkalinity in CaCO3 units		100	102	mg/L	102	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	101	mg/L	101	(90-110)	20	0.99
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.81	mg/L	141	(50-150)		
MS_202103240627	Alkalinity in CaCO3 units	180	100	219	mg/L	<u>35</u>	(80-120)		
MS_202104010067	Alkalinity in CaCO3 units	110	100	165	mg/L	<u>50</u>	(80-120)		
MSD_202103240627	Alkalinity in CaCO3 units	180	100	216	mg/L	<u>32</u>	(80-120)	20	1.6
MSD_202104010067	Alkalinity in CaCO3 units	110	100	167	mg/L	<u>52</u>	(80-120)	20	1.4
<b>Alkalinity in CaCO3 units by SM 2320B</b>									
<b>Analytical Batch: 1320930</b>					<b>Analysis Date: 04/14/2021</b>				
LCS1	Alkalinity in CaCO3 units		100	102	mg/L	102	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	103	mg/L	103	(90-110)	20	0.98
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	3.00	mg/L	150	(50-150)		
MS_202103250375	Alkalinity in CaCO3 units	180	100	258	mg/L	<u>78</u>	(80-120)		
MS_202104060217	Alkalinity in CaCO3 units	130	100	228	mg/L	98	(80-120)		
MSD_202103250375	Alkalinity in CaCO3 units	180	100	256	mg/L	<u>76</u>	(80-120)	20	0.66
MSD_202104060217	Alkalinity in CaCO3 units	130	100	227	mg/L	97	(80-120)	20	0.68

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 04/15/2021

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_



**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 04/15/2021

, Tel Fax

Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)\*

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 04/15/2021

Quant Report - Page 1 of 1

, Tel Fax

## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-55066-1  
Client Project/Site: 925810

For:  
Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:  
4/8/2021 7:45:28 PM

Xuan Dang, Project Manager I  
(714)895-5494  
[Xuan.Dang@eurofinset.com](mailto:Xuan.Dang@eurofinset.com)

### LINKS

Review your project  
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*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 925810

Job ID: 570-55066-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 925810

Job ID: 570-55066-1

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**Job ID: 570-55066-1**

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**Laboratory: Eurofins Calscience LLC**

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**Narrative**

**Job Narrative**  
**570-55066-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 3/26/2021 12:11 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.9° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

- 1
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# Detection Summary

Client: Eurofins Eaton Analytical  
Project/Site: 925810

Job ID: 570-55066-1

---

**Client Sample ID: 202103250320**

**Lab Sample ID: 570-55066-1**

No Detections.

---

**Client Sample ID: 202103250337**

**Lab Sample ID: 570-55066-2**

No Detections.

- 1
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- 13
- 14

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC



# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 925810

Job ID: 570-55066-1

## General Chemistry

**Client Sample ID: 202103250320**

**Date Collected: 03/25/21 10:52**

**Date Received: 03/26/21 12:11**

**Lab Sample ID: 570-55066-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.956	0.765	mg/L		03/31/21 10:15	03/31/21 17:11	1

**Client Sample ID: 202103250337**

**Date Collected: 03/25/21 12:28**

**Date Received: 03/26/21 12:11**

**Lab Sample ID: 570-55066-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.971	0.777	mg/L		03/31/21 10:15	03/31/21 17:11	1

# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 925810

Job ID: 570-55066-1

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 570-139887/1-A**  
**Matrix: Water**  
**Analysis Batch: 140053**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 139887**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		03/31/21 10:12	03/31/21 17:11	1

**Lab Sample ID: LCS 570-139887/2-A**  
**Matrix: Water**  
**Analysis Batch: 140053**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 139887**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	34.70		mg/L		87	78 - 114

**Lab Sample ID: LCSD 570-139887/3-A**  
**Matrix: Water**  
**Analysis Batch: 140053**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 139887**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	37.50		mg/L		94	78 - 114	8	18

# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 925810

Job ID: 570-55066-1

## General Chemistry

### Prep Batch: 139887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-55066-1	202103250320	Total/NA	Water	1664A	
570-55066-2	202103250337	Total/NA	Water	1664A	
MB 570-139887/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-139887/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-139887/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

### Analysis Batch: 140053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-55066-1	202103250320	Total/NA	Water	1664A	139887
570-55066-2	202103250337	Total/NA	Water	1664A	139887
MB 570-139887/1-A	Method Blank	Total/NA	Water	1664A	139887
LCS 570-139887/2-A	Lab Control Sample	Total/NA	Water	1664A	139887
LCSD 570-139887/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	139887

# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 925810

Job ID: 570-55066-1

**Client Sample ID: 202103250320**

**Lab Sample ID: 570-55066-1**

**Date Collected: 03/25/21 10:52**

**Matrix: Water**

**Date Received: 03/26/21 12:11**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1046 mL	1000 mL	139887	03/31/21 10:15	USUL	ECL 1
Total/NA	Analysis	1664A		1			140053	03/31/21 17:11	F7UI	ECL 1

Instrument ID: NOEQUIP

**Client Sample ID: 202103250337**

**Lab Sample ID: 570-55066-2**

**Date Collected: 03/25/21 12:28**

**Matrix: Water**

**Date Received: 03/26/21 12:11**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1030 mL	1000 mL	139887	03/31/21 10:15	USUL	ECL 1
Total/NA	Analysis	1664A		1			140053	03/31/21 17:11	F7UI	ECL 1

Instrument ID: NOEQUIP

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 925810

Job ID: 570-55066-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-30-21
California	SCAQMD LAP	17LA0919	11-30-21
California	State	2944	09-30-21
Guam	State	20-003R	10-31-20 *
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-30-22
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-21

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 925810

Job ID: 570-55066-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

**Protocol References:**

1664A = EPA-821-98-002

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 925810

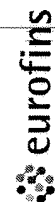
Job ID: 570-55066-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-55066-1	202103250320	Water	03/25/21 10:52	03/26/21 12:11	
570-55066-2	202103250337	Water	03/25/21 12:28	03/26/21 12:11	

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Eaton Analytical

Ship To:  
Eurofins CalScience  
7440 Lincoln Way  
Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax 714-894-7501

Folder #: 925810  
Report Due: 04/08/2021

### Submittal Form

Date: 3/26/2021

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!

Report & Invoice must have the Folder # 925810 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature.

Reports: Jackie Contreras Sub-Contracting Administrator  
EMAIL TO: Eaton-MonroviaSubContract@eurofinset.com  
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
Phone (626) 386-1165 Fax (626) 386-1122  
Invoices to: Eurofins Eaton Analytical LLC  
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the Specified State Certification # and Exp. Date for requested tests + matrix. Samples from: CALIFORNIA

Sample ID: 202103250320  
Client Sample ID for reference on: LH-INF-20210325  
Sample Date & Time Matrix: 03/25/21 1052 DW  
PWS Systemcode: PWSID  
JLS

Sample type: Oil and Grease by 1664(subbed)  
Method: EPA 1664  
Prep Method: Oil and Grease by 1664(subbed)  
Analysis Requested: Oil and Grease by 1664(subbed)

Sample ID: 202103250337  
Client Sample ID for reference on: MB-INF-20210325  
Sample Date & Time Matrix: 03/25/21 1228 DW  
PWS Systemcode: PWSID  
JLS

Sample type: Oil and Grease by 1664(subbed)  
Method: EPA 1664  
Prep Method: Oil and Grease by 1664(subbed)  
Analysis Requested: Oil and Grease by 1664(subbed)



570-55066 Chain of Custody

Relinquished by: *Jan* Date: 3/26/21 Time: 12:11  
Received by: *Jan* Date: 3/26/21 Time: 12:11  
Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

20/19 SC6





## Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-55066-1

**Login Number: 55066**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Le, Danny**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)



## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 931039  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 931039  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **April 22, 2021 at 1520**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202104220331	GAC-1-20210422	04/22/2021 0923
	Static ID: 537.1	
	@537.1	
202104220332	GAC-2-20210422	04/22/2021 0926
	@537.1	
202104220333	GAC-3-20210422	04/22/2021 0929
	@537.1	
202104220334	GAC-4-20210422	04/22/2021 0932
	@537.1	
202104220335	IX-1-20210422	04/22/2021 0935
	@537.1	
202104220337	IX-2-20210422	04/22/2021 0938
	@537.1	
202104220338	IX-3-20210422	04/22/2021 0941
	@537.1	
202104220339	IX-4-20210422	04/22/2021 0944
	@537.1	
202104220340	LH-INF-20210422	04/22/2021 0947
	@537.1	
	Dissolved Organic Carbon	Total Organic Carbon
202104220341	GAC-5-20210422	04/22/2021 1223
	@537.1	
202104220342	GAC-6-20210422	04/22/2021 1226
	@537.1	
202104220343	GAC-7-20210422	04/22/2021 1229
	@537.1	
202104220344	GAC-8-20210422	04/22/2021 1232
	@537.1	

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 931039  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **April 22, 2021 at 1520**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202104220345</u>	IX-5-20210422	04/22/2021 1235
	@537.1	
<u>202104220346</u>	IX-6-20210422	04/22/2021 1238
	@537.1	
<u>202104220347</u>	IX-7-20210422	04/22/2021 1241
	@537.1	
<u>202104220348</u>	IX-8-20210422	04/22/2021 1244
	@537.1	
<u>202104220351</u>	MB-INF-20210422	04/22/2021 1247
	@537.1	
	Dissolved Organic Carbon	Total Organic Carbon

#### Test Description

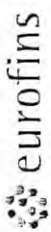
@537.1 -- EPA Method 537.1

931039

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302										
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang										
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) RDT										
LABORATORY: Eurofins Eaton Analytical		<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.												
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD														
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rditorres@gsi-net.com; Provide EDD of sample results														
LAB USE ONLY	SAMPLE ID	SAMPLING TIME		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3) (SM 2320B)	TOC (SM 5310C)	DOC	
		DATE	TIME											
	GAC-1 - 20210422	4-22	0923	Water	2		2		X					
	GAC-2 - 20210422		0926	Water	1				X					
	GAC-3 - 20210422		0929	Water	1				X					
	GAC-4 - 20210422		0932	Water	1				X					
	IX-1 - 20210422		0935	Water	1				X					
	IX-2 - 20210422		0938	Water	1				X					
	IX-3 - 20210422		0941	Water	1				X					
	IX-4 - 20210422		0944	Water	1				X					
	LH-INF - 20210422		0947	Water	4	1	3		X					
	<del>LEHH-1 - 20210422</del>			Water										
	GAC-5 - 20210422	4-22	1223	Water	2		2		X					
	GAC-6 - 20210422		1226	Water	1		1		X					
	GAC-7 - 20210422		1229	Water	1		1		X					
	GAC-8 - 20210422		1232	Water	1		1		X					
Relinquished by: (Signature) <u>Robert Torres</u>		Received by: (Signature)		Date: <u>4-22-2021</u>		Time: <u>1520</u>								
Relinquished by: (Signature)		Received by: (Signature) <u>Chris Bruck</u>		Date: <u>4-22-21</u>		Time: <u>1520</u>								
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:								

<b>FROM:</b> GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com LABORATORY: Eurofins Eaton Analytical	<b>PROJECT NAME:</b> WRD Pilot <b>PROJECT CONTACT:</b> Miae Jeon <b>GLOBAL ID:</b>	<b>PROJECT NO.:</b> 5302 <b>LAB CONTACT:</b> Sophia Liang <b>SAMPLER(S):</b> (PRINT) <i>RDT</i>																																																																																																													
<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.																																																																																																															
<b>TURNAROUND TIME:</b> <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD	<b>SPECIAL INSTRUCTIONS:</b> Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">LAB USE ONLY</th> <th rowspan="2">SAMPLE ID</th> <th colspan="2">SAMPLING</th> <th rowspan="2">MATRIX</th> <th rowspan="2">NO. OF CONT.</th> <th colspan="3">PRESERVATION</th> <th rowspan="2">PFAS - full list (EPA 537.1)</th> <th rowspan="2">Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)</th> <th rowspan="2">Alkalinity (as CaCO3), (SM 2320B)</th> <th rowspan="2">TOC (SM 5310C)</th> </tr> <tr> <th>DATE</th> <th>TIME</th> <th>Unpreserved</th> <th>Preserved</th> <th>Field Filtered</th> </tr> </thead> <tbody> <tr> <td></td> <td>IX-5 - 20210422</td> <td>4-22</td> <td>1235</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-6 - 20210422</td> <td></td> <td>1238</td> <td>Water</td> <td>↓</td> <td></td> <td>↓</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-7 - 20210422</td> <td></td> <td>1241</td> <td>Water</td> <td>↓</td> <td></td> <td>↓</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-8 - 20210422</td> <td></td> <td>1244</td> <td>Water</td> <td>↓</td> <td></td> <td>↓</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>MB-INF - 20210422</td> <td></td> <td>1247</td> <td>Water</td> <td>4</td> <td></td> <td>1</td> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td><del>MB-INF-DUP</del></td> <td></td> <td></td> <td><del>Water</del></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td><del>MB</del></td> <td></td> <td></td> <td><del>Water</del></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION			PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	DATE	TIME	Unpreserved	Preserved	Field Filtered		IX-5 - 20210422	4-22	1235	Water	2		2		X					IX-6 - 20210422		1238	Water	↓		↓		X					IX-7 - 20210422		1241	Water	↓		↓		X					IX-8 - 20210422		1244	Water	↓		↓		X					MB-INF - 20210422		1247	Water	4		1	3	X					<del>MB-INF-DUP</del>			<del>Water</del>										<del>MB</del>			<del>Water</del>								
LAB USE ONLY	SAMPLE ID	SAMPLING			MATRIX	NO. OF CONT.			PRESERVATION							PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)																																																																																												
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<b>Relinquished by:</b> (Signature) <i>Robert Torres</i>			<b>Received by:</b> (Signature)	Date: 4-22-2021 Time: 1520																																																																																																											
<b>Relinquished by:</b> (Signature)			<b>Received by:</b> (Signature) <i>Chris Brueck</i>	Date: 4-22-21 Time: 1520																																																																																																											
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Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 931099

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 610 (Observation = 8.1 °C) (Corr. Factor = 0.2 °C) (Final = 7.9 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Condition of ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) VOA and Radon Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

### Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6257,552), 505, SPME, @CH, 532L.CMS, 566, 536, Anatoxin, L.CMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: <u>Chuck Broehn</u>	PRINT NAME: <u>Chuck Broehn</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>4.22.21</u>	TIME: <u>1520</u>
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Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 931039  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

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**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202104220331</b>				
		<b><u>GAC-1-20210422</u></b>				
04/27/2021 19:26	Perfluorobutanesulfonic acid (PFBS)		0.0020		ug/L	0.0020
		<b>202104220332</b>				
		<b><u>GAC-2-20210422</u></b>				
04/27/2021 19:36	Perfluorobutanesulfonic acid (PFBS)		0.0028		ug/L	0.0020
		<b>202104220333</b>				
		<b><u>GAC-3-20210422</u></b>				
04/28/2021 09:50	Perfluorobutanesulfonic acid (PFBS)		0.0052		ug/L	0.0020
04/28/2021 09:50	Perfluorohexanoic acid (PFHxA)		0.0029		ug/L	0.0020
		<b>202104220335</b>				
		<b><u>IX-1-20210422</u></b>				
04/28/2021 10:09	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
04/28/2021 10:09	Perfluorooctanoic acid (PFOA)		0.0047		ug/L	0.0020
		<b>202104220337</b>				
		<b><u>IX-2-20210422</u></b>				
04/28/2021 10:19	Perfluoroheptanoic acid (PFHpA)		0.0020		ug/L	0.0020
04/28/2021 10:19	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
04/28/2021 10:19	Perfluorooctanoic acid (PFOA)		0.0046		ug/L	0.0020
		<b>202104220338</b>				
		<b><u>IX-3-20210422</u></b>				
04/28/2021 10:28	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
04/28/2021 10:28	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
04/28/2021 10:28	Perfluorooctanoic acid (PFOA)		0.0090		ug/L	0.0020
		<b>202104220339</b>				
		<b><u>IX-4-20210422</u></b>				
04/28/2021 10:38	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
04/28/2021 10:38	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
04/28/2021 10:38	Perfluorooctanoic acid (PFOA)		0.0046		ug/L	0.0020
		<b>202104220340</b>				
		<b><u>LH-INF-20210422</u></b>				
05/03/2021 02:53	Dissolved Organic Carbon		0.73		mg/L	0.20
04/28/2021 10:48	Perfluorobutanesulfonic acid (PFBS)		0.0069		ug/L	0.0020
04/28/2021 10:48	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
04/28/2021 10:48	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
04/28/2021 10:48	Perfluorononanoic acid (PFNA)		0.0031		ug/L	0.0020
04/28/2021 10:48	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
04/28/2021 10:48	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
05/06/2021 00:47	Total Organic Carbon		0.64		mg/L	0.20
		<b>202104220341</b>				
		<b><u>GAC-5-20210422</u></b>				
04/28/2021 10:57	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
04/28/2021 10:57	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
04/28/2021 10:57	Perfluorohexanesulfonic acid (PFHxS)		0.0047		ug/L	0.0020
04/28/2021 10:57	Perfluorohexanoic acid (PFHxA)		0.0069		ug/L	0.0020
04/28/2021 10:57	Perfluorononanoic acid (PFNA)		0.0023		ug/L	0.0020
04/28/2021 10:57	Perfluorooctanesulfonic acid (PFOS)		0.016		ug/L	0.0020
04/28/2021 10:57	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
		<b>202104220342</b>	<b><u>GAC-6-20210422</u></b>			
04/28/2021 11:07	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
04/28/2021 11:07	Perfluoroheptanoic acid (PFHpA)		0.0055		ug/L	0.0020
04/28/2021 11:07	Perfluorohexanesulfonic acid (PFHxS)		0.0075		ug/L	0.0020
04/28/2021 11:07	Perfluorohexanoic acid (PFHxA)		0.0078		ug/L	0.0020
04/28/2021 11:07	Perfluorooctanesulfonic acid (PFOS)		0.0052		ug/L	0.0020
04/28/2021 11:07	Perfluorooctanoic acid (PFOA)		0.019		ug/L	0.0020
		<b>202104220343</b>	<b><u>GAC-7-20210422</u></b>			
04/28/2021 21:04	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
04/28/2021 21:04	Perfluoroheptanoic acid (PFHpA)		0.0042		ug/L	0.0020
04/28/2021 21:04	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
04/28/2021 21:04	Perfluorohexanoic acid (PFHxA)		0.0069		ug/L	0.0020
04/28/2021 21:04	Perfluorononanoic acid (PFNA)		0.0028		ug/L	0.0020
04/28/2021 21:04	Perfluorooctanesulfonic acid (PFOS)		0.021		ug/L	0.0020
04/28/2021 21:04	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
		<b>202104220344</b>	<b><u>GAC-8-20210422</u></b>			
04/28/2021 21:13	Perfluorobutanesulfonic acid (PFBS)		0.0096		ug/L	0.0020
04/28/2021 21:13	Perfluoroheptanoic acid (PFHpA)		0.0033		ug/L	0.0020
04/28/2021 21:13	Perfluorohexanesulfonic acid (PFHxS)		0.0034		ug/L	0.0020
04/28/2021 21:13	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
04/28/2021 21:13	Perfluorooctanesulfonic acid (PFOS)		0.0088		ug/L	0.0020
04/28/2021 21:13	Perfluorooctanoic acid (PFOA)		0.0089		ug/L	0.0020
		<b>202104220345</b>	<b><u>IX-5-20210422</u></b>			
04/28/2021 21:23	Perfluoroheptanoic acid (PFHpA)		0.0023		ug/L	0.0020
04/28/2021 21:23	Perfluorohexanoic acid (PFHxA)		0.0060		ug/L	0.0020
04/28/2021 21:23	Perfluorooctanoic acid (PFOA)		0.0038		ug/L	0.0020
		<b>202104220346</b>	<b><u>IX-6-20210422</u></b>			
04/28/2021 21:33	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
04/28/2021 21:33	Perfluorohexanoic acid (PFHxA)		0.0069		ug/L	0.0020
04/28/2021 21:33	Perfluorooctanoic acid (PFOA)		0.0052		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		<b>202104220347</b>				
		<b><u>IX-7-20210422</u></b>				
04/28/2021 21:42	Perfluoroheptanoic acid (PFHpA)		0.0048		ug/L	0.0020
04/28/2021 21:42	Perfluorohexanoic acid (PFHxA)		0.0065		ug/L	0.0020
04/28/2021 21:42	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		<b>202104220348</b>				
		<b><u>IX-8-20210422</u></b>				
04/28/2021 21:52	Perfluoroheptanoic acid (PFHpA)		0.0046		ug/L	0.0020
04/28/2021 21:52	Perfluorohexanoic acid (PFHxA)		0.0067		ug/L	0.0020
04/28/2021 21:52	Perfluorooctanoic acid (PFOA)		0.0070		ug/L	0.0020
		<b>202104220351</b>				
		<b><u>MB-INF-20210422</u></b>				
05/02/2021 15:09	Dissolved Organic Carbon		0.70		mg/L	0.20
04/28/2021 22:12	Perfluorobutanesulfonic acid (PFBS)		0.0097		ug/L	0.0020
04/28/2021 22:12	Perfluoroheptanoic acid (PFHpA)		0.0039		ug/L	0.0020
04/28/2021 22:12	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
04/28/2021 22:12	Perfluorohexanoic acid (PFHxA)		0.0061		ug/L	0.0020
04/28/2021 22:12	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
04/28/2021 22:12	Perfluorooctanesulfonic acid (PFOS)		0.042		ug/L	0.0020
04/28/2021 22:12	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
05/04/2021 06:50	Total Organic Carbon		0.80		mg/L	0.20

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20210422 (202104220331)</b>					<b>Sampled on 04/22/2021 0923</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0020	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	13C2-PFDA	81	%	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	13C2-PFHxA	90	%	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	13C2-PFOA- IS#1	124	%	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	13C3-HFPO-DA	85	%	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	13C4-PFOS- IS#2	106	%	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	d3-NMeFOSAA	93	%	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	d5-NEtFOSAA	96	%	1

<b>GAC-2-20210422 (202104220332)</b>					<b>Sampled on 04/22/2021 0926</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
04/26/21	04/27/21	19:36	1323263	1323895	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0020	1
04/26/21	04/27/21	19:36	1323263	1323895	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0028	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	13C2-PFDA	83	%		1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	13C2-PFHxA	96	%		1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	13C3-HFPO-DA	91	%		1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	d3-NMeFOSAA	96	%		1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**GAC-3-20210422 (202104220333)**

Sampled on 04/22/2021 0929

**EPA 537.1 - EPA Method 537.1**

04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0052	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0029	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	13C2-PFDA	92	%		1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	13C2-PFHxA	101	%		1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	96	%		1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	94	%		1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	101	%		1

**GAC-4-20210422 (202104220334)**

Sampled on 04/22/2021 0932

**EPA 537.1 - EPA Method 537.1**

04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	13C2-PFDA	89	%		1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	13C2-PFHxA	97	%		1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	92	%		1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	92	%		1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	95	%		1

**IX-1-20210422 (202104220335)**

Sampled on 04/22/2021 0935

**EPA 537.1 - EPA Method 537.1**

04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0047	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	13C2-PFDA	95	%		1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	13C2-PFHxA	102	%		1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	102	%		1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	95	%		1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	96	%		1

**IX-2-20210422 (202104220337)**

**Sampled on 04/22/2021 0938**

**EPA 537.1 - EPA Method 537.1**

04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0020	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0046	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	13C2-PFDA	99	%		1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	13C2-PFHxA	106	%		1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	104	%		1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	89	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	98	%		1
<b>IX-3-20210422 (202104220338)</b>					<b>Sampled on 04/22/2021 0941</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0090	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	13C2-PFDA	95	%		1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	13C2-PFHxA	103	%		1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	104	%		1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	92	%		1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	93	%		1

**IX-4-20210422 (202104220339)**

**Sampled on 04/22/2021 0944**

**EPA 537.1 - EPA Method 537.1**

04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0046	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	13C2-PFDA	90	%		1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	13C2-PFHxA	100	%		1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	99	%		1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	92	%		1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	d5-NETFOSAA	97	%		1

**LH-INF-20210422 (202104220340)**

**Sampled on 04/22/2021 0947**

**SM 5310C - Total Organic Carbon**

05/06/21 00:47	1325830	(SM 5310C)	Total Organic Carbon	0.64	mg/L	0.20	1
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**SM 5310C - Dissolved Organic Carbon**

04/22/21 05/03/21 02:53	1322809	1324825	(SM 5310C)	Dissolved Organic Carbon	0.73	mg/L	0.20	1
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**EPA 537.1 - EPA Method 537.1**

04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0069	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0031	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	13C2-PFDA	97	%		1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	13C2-PFHxA	104	%		1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	101	%		1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	91	%		1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	96	%		1

**GAC-5-20210422 (202104220341)**

Sampled on 04/22/2021 1223

**EPA 537.1 - EPA Method 537.1**

04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0047	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0069	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0023	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.016	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	13C2-PFDA	89	%		1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	13C2-PFHxA	101	%		1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	99	%		1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	94	%		1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	92	%		1

**GAC-6-20210422 (202104220342)**

Sampled on 04/22/2021 1226

**EPA 537.1 - EPA Method 537.1**

04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0055	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0075	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0078	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0052	ug/L	0.0020	1

Rounding on totals after summation.  
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Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.019	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	13C2-PFDA	98	%		1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	13C2-PFHxA	106	%		1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	104	%		1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	94	%		1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	94	%		1

**GAC-7-20210422 (202104220343)**

Sampled on 04/22/2021 1229

**EPA 537.1 - EPA Method 537.1**

04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0042	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0069	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0028	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.021	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	13C2-PFDA	105	%		1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	13C2-PFHxA	110	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	13C3-HFPO-DA	103	%		1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	d3-NMeFOSAA	101	%		1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**GAC-8-20210422 (202104220344)**

**Sampled on 04/22/2021 1232**

**EPA 537.1 - EPA Method 537.1**

04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0096	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0034	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0088	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0089	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	13C2-PFDA	102	%		1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	13C2-PFHxA	109	%		1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	13C3-HFPO-DA	105	%		1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	d3-NMeFOSAA	101	%		1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**IX-5-20210422 (202104220345)**

**Sampled on 04/22/2021 1235**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 537.1 - EPA Method 537.1</b>									
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	11-chloro-eicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0023	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0060	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0038	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	13C2-PFDA	102	%		1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	13C2-PFHxA	103	%		1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	13C3-HFPO-DA	102	%		1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	d3-NMeFOSAA	105	%		1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	d5-NEtFOSAA	100	%		1

**IX-6-20210422 (202104220346)**

Sampled on 04/22/2021 1238

<b>EPA 537.1 - EPA Method 537.1</b>									
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	11-chloro-eicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0069	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0052	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	13C2-PFDA	108	%		1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	13C2-PFHxA	111	%		1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	13C3-HFPO-DA	107	%		1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	d3-NMeFOSAA	101	%		1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**IX-7-20210422 (202104220347)**

Sampled on 04/22/2021 1241

**EPA 537.1 - EPA Method 537.1**

04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0048	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0065	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	13C2-PFDA	116	%		1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	13C2-PFHxA	119	%		1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	13C3-HFPO-DA	114	%		1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	d3-NMeFOSAA	103	%		1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**IX-8-20210422 (202104220348)**

Sampled on 04/22/2021 1244

**EPA 537.1 - EPA Method 537.1**

04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0046	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0067	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0070	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	13C2-PFDA	111	%		1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	13C2-PFHxA	119	%		1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	13C3-HFPO-DA	117	%		1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	d3-NMeFOSAA	103	%		1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	d5-NEtFOSAA	118	%		1

**MB-INF-20210422 (202104220351)**

Sampled on 04/22/2021 1247

**SM 5310C - Total Organic Carbon**

05/04/21 06:50	1325001	(SM 5310C)	Total Organic Carbon	0.80	mg/L	0.20	1
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**SM 5310C - Dissolved Organic Carbon**

04/22/21 05/02/21 15:09	1322809	1324825	(SM 5310C)	Dissolved Organic Carbon	0.70	mg/L	0.20	1
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**EPA 537.1 - EPA Method 537.1**

04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0097	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0039	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0061	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.042	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

**Report:** 931039  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	13C2-PFDA	109	%		1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	13C2-PFHxA	114	%		1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	13C3-HFPO-DA	112	%		1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	d3-NMeFOSAA	97	%		1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	d5-NEtFOSAA	115	%		1

Rounding on totals after summation.  
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**Report:** 931039  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

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**EPA Method 537.1**

**Prep Batch: 1323263 Analytical Batch: 1323895**

202104220331 GAC-1-20210422  
 202104220332 GAC-2-20210422

**Analysis Date: 04/27/2021**

Analyzed by: KAM  
 Analyzed by: KAM

**EPA Method 537.1**

**Prep Batch: 1323411 Analytical Batch: 1324052**

202104220333 GAC-3-20210422  
 202104220334 GAC-4-20210422  
 202104220335 IX-1-20210422  
 202104220337 IX-2-20210422  
 202104220338 IX-3-20210422  
 202104220339 IX-4-20210422  
 202104220340 LH-INF-20210422  
 202104220341 GAC-5-20210422  
 202104220342 GAC-6-20210422

**Analysis Date: 04/28/2021**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM

**EPA Method 537.1**

**Prep Batch: 1323664 Analytical Batch: 1324216**

202104220343 GAC-7-20210422  
 202104220344 GAC-8-20210422  
 202104220345 IX-5-20210422  
 202104220346 IX-6-20210422  
 202104220347 IX-7-20210422  
 202104220348 IX-8-20210422  
 202104220351 MB-INF-20210422

**Analysis Date: 04/28/2021**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM

**Dissolved Organic Carbon**

**Prep Batch: 1322809 Analytical Batch: 1324825**

202104220340 LH-INF-20210422  
 202104220351 MB-INF-20210422

**Analysis Date: 05/03/2021**

Analyzed by: WBH  
 Analyzed by: WBH

**Total Organic Carbon**

**Analytical Batch: 1325001**

202104220351 MB-INF-20210422

**Analysis Date: 05/04/2021**

Analyzed by: WBH

**Total Organic Carbon**

**Analytical Batch: 1325830**

202104220340 LH-INF-20210422

**Analysis Date: 05/06/2021**

Analyzed by: WBH

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>EPA Method 537.1 by EPA 537.1</b>									
<b>Prep Batch: 1323263 Analytical Batch: 1323895</b>					<b>Analysis Date: 04/27/2021</b>				
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0244	ug/L	104	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0242	ug/L	103	(70-130)	30	0.82
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00197	ug/L	105	(50-150)		
MS1_202104200381	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0250	ug/L	106	(70-130)		
MSD1_202104200381	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0257	ug/L	109	(70-130)	30	2.8
LCS1	13C2-PFDA (S)		100	90.1	%	90	(70-130)		
LCS2	13C2-PFDA (S)		100	91.0	%	91	(70-130)		
MBLK	13C2-PFDA (S)			90.1	%	90	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	91.8	%	92	(70-130)		
MS1_202104200381	13C2-PFDA (S)		100	83.0	%	83	(70-130)		
MSD1_202104200381	13C2-PFDA (S)		100	89.8	%	90	(70-130)		
LCS1	13C2-PFHxA (S)		100	99.6	%	100	(70-130)		
LCS2	13C2-PFHxA (S)		100	99.3	%	99	(70-130)		
MBLK	13C2-PFHxA (S)			100	%	100	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	97.5	%	97	(70-130)		
MS1_202104200381	13C2-PFHxA (S)		100	95.1	%	95	(70-130)		
MSD1_202104200381	13C2-PFHxA (S)		100	99.1	%	99	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			111	%	111	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	115	%	115	(50-150)		
MS1_202104200381	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
MSD1_202104200381	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	93.9	%	94	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	95.9	%	96	(70-130)		
MBLK	13C3-HFPO-DA (S)			95.8	%	96	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	93.3	%	93	(70-130)		
MS1_202104200381	13C3-HFPO-DA (S)		100	93.2	%	93	(70-130)		
MSD1_202104200381	13C3-HFPO-DA (S)		100	95.6	%	96	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			103	%	103	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	110	%	110	(50-150)		
MS1_202104200381	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD1_202104200381	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0242	ug/L	102	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0247	ug/L	104	(70-130)	30	2.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00207	ug/L	109	(50-150)		
MS1_202104200381	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0241	ug/L	102	(70-130)		
MSD1_202104200381	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0258	ug/L	109	(70-130)	30	6.7
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0244	ug/L	105	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0243	ug/L	104	(70-130)	30	0.82
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00200	ug/L	107	(50-150)		
MS1_202104200381	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0249	ug/L	107	(70-130)		
MSD1_202104200381	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0266	ug/L	114	(70-130)	30	7.0
LCS1	d3-NMeFOSAA (I)		100	93.0	%	93	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	92.0	%	92	(50-150)		
MBLK	d3-NMeFOSAA (I)			86.9	%	87	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	94.3	%	94	(50-150)		
MS1_202104200381	d3-NMeFOSAA (I)		100	93.2	%	93	(50-150)		
MSD1_202104200381	d3-NMeFOSAA (I)		100	91.4	%	91	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	95.4	%	95	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	97.2	%	97	(70-130)		
MBLK	d5-NEtFOSAA (S)			102	%	102	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	100	%	100	(70-130)		
MS1_202104200381	d5-NEtFOSAA (S)		100	92.2	%	92	(70-130)		
MSD1_202104200381	d5-NEtFOSAA (S)		100	93.7	%	94	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0258	ug/L	103	(70-130)	30	3.1
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00207	ug/L	103	(50-150)		
MS1_202104200381	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0249	ug/L	100	(70-130)		
MSD1_202104200381	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0263	ug/L	105	(70-130)	30	5.5
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0263	ug/L	105	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0275	ug/L	110	(70-130)	30	4.5
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00225	ug/L	113	(50-150)		
MS1_202104200381	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0272	ug/L	108	(70-130)		
MSD1_202104200381	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0276	ug/L	110	(70-130)	30	1.7
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0262	ug/L	105	(70-130)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.



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Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0267	ug/L	107	(70-130)	30	1.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS1_202104200381	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0258	ug/L	102	(70-130)		
MSD1_202104200381	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0274	ug/L	109	(70-130)	30	6.0
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0237	ug/L	107	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0241	ug/L	109	(70-130)	30	1.7
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00205	ug/L	116	(50-150)		
MS1_202104200381	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0248	ug/L	111	(70-130)		
MSD1_202104200381	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0262	ug/L	117	(70-130)	30	5.4
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0264	ug/L	106	(70-130)	30	1.1
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00218	ug/L	109	(50-150)		
MS1_202104200381	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0250	ug/L	100	(70-130)		
MSD1_202104200381	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0264	ug/L	106	(70-130)	30	5.6
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0236	ug/L	95	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0237	ug/L	95	(70-130)	30	0.42
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00193	ug/L	97	(50-150)		
MS1_202104200381	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0226	ug/L	90	(70-130)		
MSD1_202104200381	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0243	ug/L	97	(70-130)	30	7.0
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0264	ug/L	105	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0271	ug/L	108	(70-130)	30	2.6
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00229	ug/L	115	(50-150)		
MS1_202104200381	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0266	ug/L	104	(70-130)		
MSD1_202104200381	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0285	ug/L	112	(70-130)	30	7.0
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0258	ug/L	113	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0253	ug/L	111	(70-130)	30	2.3
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00202	ug/L	111	(50-150)		
MS1_202104200381	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0270	ug/L	115	(70-130)		
MSD1_202104200381	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0281	ug/L	120	(70-130)	30	3.8
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0270	ug/L	108	(70-130)	30	3.4
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00225	ug/L	112	(50-150)		
MS1_202104200381	Perfluorohexanoic acid (PFHxA)	0.0030	0.025	0.0283	ug/L	101	(70-130)		
MSD1_202104200381	Perfluorohexanoic acid (PFHxA)	0.0030	0.025	0.0305	ug/L	110	(70-130)	30	7.6
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0278	ug/L	111	(70-130)	30	0.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00234	ug/L	117	(50-150)		
MS1_202104200381	Perfluorononanoic acid (PFNA)	ND	0.025	0.0274	ug/L	109	(70-130)		
MSD1_202104200381	Perfluorononanoic acid (PFNA)	ND	0.025	0.0283	ug/L	112	(70-130)	30	3.2
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0249	ug/L	108	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0254	ug/L	110	(70-130)	30	2.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00211	ug/L	114	(50-150)		
MS1_202104200381	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0258	ug/L	111	(70-130)		
MSD1_202104200381	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0266	ug/L	114	(70-130)	30	3.4
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0267	ug/L	107	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0276	ug/L	110	(70-130)	30	3.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00243	ug/L	122	(50-150)		
MS1_202104200381	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0289	ug/L	112	(70-130)		
MSD1_202104200381	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0292	ug/L	114	(70-130)	30	1.2
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0244	ug/L	98	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0250	ug/L	100	(70-130)	30	2.4
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00234	ug/L	117	(50-150)		
MS1_202104200381	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0239	ug/L	95	(70-130)		
MSD1_202104200381	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0246	ug/L	98	(70-130)	30	2.7
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0242	ug/L	97	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0248	ug/L	99	(70-130)	30	2.9
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00205	ug/L	103	(50-150)		
MS1_202104200381	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0230	ug/L	92	(70-130)		
MSD1_202104200381	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0247	ug/L	99	(70-130)	30	7.0
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0247	ug/L	99	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0245	ug/L	98	(70-130)	30	0.81
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00200	ug/L	100	(50-150)		
MS1_202104200381	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0230	ug/L	92	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD1_202104200381	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0249	ug/L	100	(70-130)	30	7.8

EPA Method 537.1 by EPA 537.1

Prep Batch: 1323411 Analytical Batch: 1324052

Analysis Date: 04/28/2021

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0244	ug/L	104	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0252	ug/L	107	(70-130)	30	3.2
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00203	ug/L	108	(50-150)		
MS_202104200382	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00203	ug/L	108	(50-150)		
MSD_202104200382	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00206	ug/L	110	(50-150)	50	1.6
LCS1	13C2-PFDA (S)		100	98.1	%	98	(70-130)		
LCS2	13C2-PFDA (S)		100	101	%	101	(70-130)		
MBLK	13C2-PFDA (S)			96.4	%	96	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.8	%	99	(70-130)		
MS_202104200382	13C2-PFDA (S)		100	95.3	%	95	(70-130)		
MSD_202104200382	13C2-PFDA (S)		100	93.1	%	93	(70-130)		
LCS1	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS2	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFHxA (S)			102	%	102	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	100	%	100	(70-130)		
MS_202104200382	13C2-PFHxA (S)		100	99.8	%	100	(70-130)		
MSD_202104200382	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	97.6	%	98	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	99.1	%	99	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			103	%	103	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MS_202104200382	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MSD_202104200382	13C2-PFOA- IS#1 (I)		100	100	%	101	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MBLK	13C3-HFPO-DA (S)			102	%	102	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MS_202104200382	13C3-HFPO-DA (S)		100	98.7	%	99	(70-130)		
MSD_202104200382	13C3-HFPO-DA (S)		100	100	%	100	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	99.3	%	99	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	99.6	%	100	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			104	%	104	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202104200382	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
MSD_202104200382	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0256	ug/L	108	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0256	ug/L	108	(70-130)	30	0.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00215	ug/L	114	(50-150)		
MS_202104200382	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00210	ug/L	110	(50-150)		
MSD_202104200382	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00212	ug/L	111	(50-150)	50	0.89
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0256	ug/L	110	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0257	ug/L	110	(70-130)	30	0.39
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00215	ug/L	116	(50-150)		
MS_202104200382	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00214	ug/L	115	(50-150)		
MSD_202104200382	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00214	ug/L	115	(50-150)	50	0.066
LCS1	d3-NMeFOSAA (I)		100	96.1	%	96	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	97.4	%	97	(50-150)		
MBLK	d3-NMeFOSAA (I)			89.6	%	90	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	97.5	%	97	(50-150)		
MS_202104200382	d3-NMeFOSAA (I)		100	98.6	%	99	(50-150)		
MSD_202104200382	d3-NMeFOSAA (I)		100	95.8	%	96	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	93.8	%	94	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	91.8	%	92	(70-130)		
MBLK	d5-NEtFOSAA (S)			102	%	102	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	92.3	%	92	(70-130)		
MS_202104200382	d5-NEtFOSAA (S)		100	90.1	%	90	(70-130)		
MSD_202104200382	d5-NEtFOSAA (S)		100	92.8	%	93	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0263	ug/L	105	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0266	ug/L	106	(70-130)	30	1.1
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202104200382	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00220	ug/L	110	(50-150)		
MSD_202104200382	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00229	ug/L	115	(50-150)	50	4.0
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0255	ug/L	102	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0252	ug/L	101	(70-130)	30	1.2
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00208	ug/L	104	(50-150)		
MS_202104200382	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00220	ug/L	110	(50-150)		
MSD_202104200382	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00217	ug/L	108	(50-150)	50	1.3

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0264	ug/L	105	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0259	ug/L	104	(70-130)	30	1.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS_202104200382	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00224	ug/L	112	(50-150)		
MSD_202104200382	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00236	ug/L	118	(50-150)	50	5.4
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0235	ug/L	106	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0246	ug/L	111	(70-130)	30	4.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00205	ug/L	116	(50-150)		
MS_202104200382	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00213	ug/L	120	(50-150)		
MSD_202104200382	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00215	ug/L	122	(50-150)	50	0.90
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0267	ug/L	107	(70-130)	30	1.9
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00229	ug/L	115	(50-150)		
MS_202104200382	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00222	ug/L	111	(50-150)		
MSD_202104200382	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00232	ug/L	116	(50-150)	50	4.4
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0262	ug/L	105	(70-130)	30	4.3
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202104200382	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00212	ug/L	106	(50-150)		
MSD_202104200382	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00211	ug/L	105	(50-150)	50	0.49
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0265	ug/L	106	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0268	ug/L	107	(70-130)	30	1.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00235	ug/L	118	(50-150)		
MS_202104200382	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00234	ug/L	115	(50-150)		
MSD_202104200382	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00232	ug/L	114	(50-150)	50	0.67
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0246	ug/L	108	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0254	ug/L	111	(70-130)	30	3.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00212	ug/L	116	(50-150)		
MS_202104200382	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00219	ug/L	115	(50-150)		
MSD_202104200382	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00225	ug/L	119	(50-150)	50	2.6
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0273	ug/L	109	(70-130)	30	1.1

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00232	ug/L	116	(50-150)		
MS_202104200382	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00249	ug/L	115	(50-150)		
MSD_202104200382	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00246	ug/L	114	(50-150)	50	1.3
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0276	ug/L	110	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0276	ug/L	110	(70-130)	30	0.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00244	ug/L	122	(50-150)		
MS_202104200382	Perfluorononanoic acid (PFNA)	ND	0.002	0.00229	ug/L	115	(50-150)		
MSD_202104200382	Perfluorononanoic acid (PFNA)	ND	0.002	0.00243	ug/L	122	(50-150)	50	5.9
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0249	ug/L	108	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0256	ug/L	111	(70-130)	30	2.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00219	ug/L	118	(50-150)		
MS_202104200382	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00211	ug/L	111	(50-150)		
MSD_202104200382	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00222	ug/L	117	(50-150)	50	5.3
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0275	ug/L	110	(70-130)	30	1.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00254	ug/L	127	(50-150)		
MS_202104200382	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00254	ug/L	118	(50-150)		
MSD_202104200382	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00248	ug/L	115	(50-150)	50	2.6
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0292	ug/L	117	(70-130)	30	0.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00264	ug/L	132	(50-150)		
MS_202104200382	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00261	ug/L	118	(50-150)		
MSD_202104200382	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00276	ug/L	125	(50-150)	50	5.7
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0271	ug/L	108	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0275	ug/L	110	(70-130)	30	1.5
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202104200382	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00229	ug/L	115	(50-150)		
MSD_202104200382	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00234	ug/L	117	(50-150)	50	2.0
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0261	ug/L	104	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0264	ug/L	105	(70-130)	30	1.1
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00207	ug/L	104	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202104200382	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00230	ug/L	115	(50-150)		
MSD_202104200382	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00222	ug/L	111	(50-150)	50	3.5

EPA Method 537.1 by EPA 537.1

Prep Batch: 1323664 Analytical Batch: 1324216

Analysis Date: 04/28/2021

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202104220564	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0477	ug/L	101	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0503	ug/L	107	(70-130)	30	5.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00207	ug/L	110	(50-150)		
MS1_202104220570	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0254	ug/L	108	(70-130)		
DUP_202104220564	13C2-PFDA (S)			108	%	108	(70-130)		
LCS3	13C2-PFDA (S)		100	99.1	%	99	(70-130)		
LCS4	13C2-PFDA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFDA (S)			93.5	%	94	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	104	%	104	(70-130)		
MS1_202104220570	13C2-PFDA (S)		100	101	%	101	(70-130)		
DUP_202104220564	13C2-PFHxA (S)			113	%	113	(70-130)		
LCS3	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS4	13C2-PFHxA (S)		100	110	%	110	(70-130)		
MBLK	13C2-PFHxA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	108	%	108	(70-130)		
MS1_202104220570	13C2-PFHxA (S)		100	105	%	105	(70-130)		
DUP_202104220564	13C2-PFOA- IS#1 (I)			103	%	103	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			109	%	109	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS1_202104220570	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
DUP_202104220564	13C3-HFPO-DA (S)			111	%	111	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
MBLK	13C3-HFPO-DA (S)			99.7	%	100	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
MS1_202104220570	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
DUP_202104220564	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	98.8	%	99	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MS1_202104220570	13C4-PFOS- IS#2 (I)		100	99.1	%	99	(50-150)		
DUP_202104220564	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0485	ug/L	100	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0491	ug/L	101	(70-130)	30	1.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00204	ug/L	108	(50-150)		
MS1_202104220570	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0254	ug/L	107	(70-130)		
DUP_202104220564	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0482	ug/L	104	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0490	ug/L	105	(70-130)	30	1.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00216	ug/L	116	(50-150)		
MS1_202104220570	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0250	ug/L	107	(70-130)		
DUP_202104220564	d3-NMeFOSAA (I)			102	%	102	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	98.3	%	98	(50-150)		
MBLK	d3-NMeFOSAA (I)			97.6	%	98	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MS1_202104220570	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
DUP_202104220564	d5-NEtFOSAA (S)			106	%	106	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	93.4	%	93	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MBLK	d5-NEtFOSAA (S)			97.6	%	98	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
MS1_202104220570	d5-NEtFOSAA (S)		100	97.5	%	98	(70-130)		
DUP_202104220564	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0512	ug/L	102	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0502	ug/L	100	(70-130)	30	2.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00219	ug/L	110	(50-150)		
MS1_202104220570	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0264	ug/L	106	(70-130)		
DUP_202104220564	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0496	ug/L	99	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0509	ug/L	102	(70-130)	30	2.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202104220570	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0266	ug/L	106	(70-130)		
DUP_202104220564	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0501	ug/L	100	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0516	ug/L	103	(70-130)	30	3.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00222	ug/L	111	(50-150)		
MS1_202104220570	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0265	ug/L	106	(70-130)		
DUP_202104220564	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0465	ug/L	105	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0475	ug/L	107	(70-130)	30	2.1
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00195	ug/L	110	(50-150)		
MS1_202104220570	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0255	ug/L	111	(70-130)		
DUP_202104220564	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0506	ug/L	101	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0534	ug/L	107	(70-130)	30	5.4
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00228	ug/L	114	(50-150)		
MS1_202104220570	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0274	ug/L	109	(70-130)		
DUP_202104220564	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0483	ug/L	97	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0491	ug/L	98	(70-130)	30	1.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00207	ug/L	103	(50-150)		
MS1_202104220570	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0260	ug/L	104	(70-130)		
DUP_202104220564	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0532	ug/L	107	(70-130)	30	1.7
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00234	ug/L	117	(50-150)		
MS1_202104220570	Perfluoroheptanoic acid (PFHpA)	0.0025	0.025	0.0299	ug/L	110	(70-130)		
DUP_202104220564	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0503	ug/L	110	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0495	ug/L	109	(70-130)	30	1.6
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00203	ug/L	111	(50-150)		
MS1_202104220570	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0268	ug/L	113	(70-130)		
DUP_202104220564	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0526	ug/L	105	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0524	ug/L	105	(70-130)	30	0.38
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00222	ug/L	111	(50-150)		
MS1_202104220570	Perfluorohexanoic acid (PFHxA)	0.0027	0.025	0.0293	ug/L	107	(70-130)		
DUP_202104220564	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0517	ug/L	103	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0522	ug/L	104	(70-130)	30	0.96
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00240	ug/L	120	(50-150)		
MS1_202104220570	Perfluorononanoic acid (PFNA)	ND	0.025	0.0284	ug/L	113	(70-130)		
DUP_202104220564	Perfluorooctanesulfonic acid (PFOS)	0.0020		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0479	ug/L	103	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0489	ug/L	106	(70-130)	30	2.1
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00214	ug/L	116	(50-150)		
MS1_202104220570	Perfluorooctanesulfonic acid (PFOS)	0.0046	0.023	0.0295	ug/L	108	(70-130)		
DUP_202104220564	Perfluorooctanoic acid (PFOA)	0.0025		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0531	ug/L	106	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0537	ug/L	107	(70-130)	30	1.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00252	ug/L	126	(50-150)		
MS1_202104220570	Perfluorooctanoic acid (PFOA)	0.0057	0.025	0.0326	ug/L	108	(70-130)		
DUP_202104220564	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0526	ug/L	105	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0554	ug/L	111	(70-130)	30	5.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00245	ug/L	122	(50-150)		
MS1_202104220570	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0281	ug/L	112	(70-130)		
DUP_202104220564	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0491	ug/L	98	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0501	ug/L	100	(70-130)	30	2.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00215	ug/L	107	(50-150)		
MS1_202104220570	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0263	ug/L	105	(70-130)		
DUP_202104220564	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0499	ug/L	100	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0517	ug/L	103	(70-130)	30	3.5

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 931039  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00214	ug/L	107	(50-150)		
MS1_202104220570	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0264	ug/L	106	(70-130)		

**Dissolved Organic Carbon by SM 5310C**

**Analytical Batch: 1324825**

**Analysis Date: 05/02/2021**

LCS1	Dissolved Organic Carbon		5	5.21	mg/L	104	(90-110)		
LCS2	Dissolved Organic Carbon		5	5.34	mg/L	107	(90-110)	20	2.5
MBLK	Dissolved Organic Carbon			<0.10	mg/L				
MRL_CHK	Dissolved Organic Carbon		0.2	0.266	mg/L	133	(50-150)		
MS_202105020070	Dissolved Organic Carbon	8.1	4	51.4	mg/L	108	(80-120)		
MS2_202105020071	Dissolved Organic Carbon	1.3	2	3.46	mg/L	109	(80-120)		
MSD_202105020070	Dissolved Organic Carbon	8.1	4	51.3	mg/L	108	(80-120)	20	0.25
MSD2_202105020071	Dissolved Organic Carbon	1.3	2	3.42	mg/L	107	(80-120)	20	1.1

**Total Organic Carbon by SM 5310C**

**Analytical Batch: 1325001**

**Analysis Date: 05/04/2021**

LCS1	Total Organic Carbon		5	5.31	mg/L	106	(90-110)		
LCS2	Total Organic Carbon		5	5.29	mg/L	106	(90-110)	20	0.38
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.281	mg/L	141	(50-150)		
MS_202104220351	Total Organic Carbon	0.80	4	4.96	mg/L	104	(80-120)		
MS2_202104210569	Total Organic Carbon	4.8	2	15.5	mg/L	107	(80-120)		
MSD_202104220351	Total Organic Carbon	0.80	4	4.98	mg/L	105	(80-120)	20	0.40
MSD2_202104210569	Total Organic Carbon	4.8	2	15.6	mg/L	108	(80-120)	20	0.87

**Total Organic Carbon by SM 5310C**

**Analytical Batch: 1325830**

**Analysis Date: 05/05/2021**

LCS1	Total Organic Carbon		5	5.32	mg/L	106	(90-110)		
LCS2	Total Organic Carbon		5	5.30	mg/L	106	(90-110)	20	0.38
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.261	mg/L	131	(50-150)		
MS_202104230605	Total Organic Carbon	0.68	4	4.89	mg/L	105	(80-120)		
MS2_202104220470	Total Organic Carbon	0.88	2	3.20	mg/L	116	(80-120)		
MSD_202104230605	Total Organic Carbon	0.68	4	4.92	mg/L	106	(80-120)	20	0.53
MSD2_202104220470	Total Organic Carbon	0.88	2	3.07	mg/L	109	(80-120)	20	4.3

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Fecal Coliform Small, Fecal Coliform Large), MPN/100 mL (Fecal Coliform), Presence/Absence (P/A)\* (Fecal Coliform)

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 05/07/2021

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 05/07/2021

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 05/07/2021

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn:

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)\*

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 05/07/2021

Quant Report - Page 1 of 1

, Tel Fax



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## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 936465  
Project: 0250000  
Group: WRD Pilot [Set #1]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 936465  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **May 20, 2021 at 1400**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202105200575</u>	GAC-1-20210520	05/20/2021 0933
	@537.1	
<u>202105200576</u>	GAC-2-20210520	05/20/2021 0936
	@537.1	
<u>202105200577</u>	GAC-3-20210520	05/20/2021 0939
	@537.1	
<u>202105200578</u>	GAC-4-20210520	05/20/2021 0942
	@537.1	
<u>202105200579</u>	IX-1-20210520	05/20/2021 0945
	@537.1	
<u>202105200580</u>	IX-2-20210520	05/20/2021 0948
	@537.1	
<u>202105200581</u>	IX-3-20210520	05/20/2021 0951
	@537.1	
<u>202105200582</u>	IX-4-20210520	05/20/2021 0954
	@537.1	
<u>202105200583</u>	GAC-1M-20210520	05/20/2021 0957
	@537.1	
<u>202105200584</u>	GAC-2M-20210520	05/20/2021 1000
	@537.1	
<u>202105200585</u>	GAC-3M-20210520	05/20/2021 1003
	@537.1	
<u>202105200586</u>	GAC-4M-20210520	05/20/2021 1006
	@537.1	
<u>202105200587</u>	IX-1M-20210520	05/20/2021 1009
	@537.1	

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 936465  
Project: 0250000  
Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

The following samples were received from you on **May 20, 2021** at **1400**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202105200588	IX-2M-20210520	05/20/2021 1012
	@537.1	
202105200589	IX-3M-20210520	05/20/2021 1015
	@537.1	
202105200590	IX-4M-20210520	05/20/2021 1018
	@537.1	
202105200592	LH-INF-20210520	05/20/2021 1021
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Calcium Total ICAP
	Chloride	Hexavalent chromium(Dissolved)
	Iron Total ICAP	Magnesium Total ICAP
	Manganese Total ICAP/MS	Potassium Total ICAP
	Sodium Total ICAP	Total Dissolved Solid (TDS)
	Total Hardness as CaCO3 by ICP	Total Suspended Solids (TSS)
	Uranium by ICPMS as pCi/L	
	Arsenic Total ICAP/MS	
	Dissolved Organic Carbon	
	L-CLO4	
	Oil and Grease by 1664(subbed)	
	Sulfate	
	Total Organic Carbon	
	Uranium ICAP/MS	

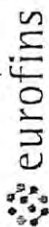
### Test Description

@537.1 -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

@VOASDWA -- Volatile Organics by GCMS





Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 936465

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.  
SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 618A (Observation = 15-6 °C) (Corr. Factor = 0.2 °C) (Final = 15-4 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Condition of Ice: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) VOA and Radon Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 615.4, HAA(6261,662), 505, SPME, @CH, 632LCMS, 666, 636, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm
0252	1						

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY:	PRINT NAME: <u>YIM1</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>5/20/24</u>	TIME: <u>14:00</u>
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Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 936465  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

**Folder Comments**

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Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove,  
CAELAP 2944 exp 9-30-2021

**Flags Legend:**

B4 - Target analyte detected in blank at or above method acceptance criteria.  
HA - Initial analysis within holding time. Reanalysis was past holding time.



**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202105200575      <u>GAC-1-20210520</u></b>						
05/24/2021 17:45	Perfluorobutanesulfonic acid (PFBS)		0.0026		ug/L	0.0020
05/24/2021 17:45	Perfluorohexanoic acid (PFHxA)		0.0024		ug/L	0.0020
<b>202105200576      <u>GAC-2-20210520</u></b>						
05/24/2021 17:55	Perfluorobutanesulfonic acid (PFBS)		0.0053		ug/L	0.0020
<b>202105200577      <u>GAC-3-20210520</u></b>						
05/24/2021 18:04	Perfluorobutanesulfonic acid (PFBS)		0.0061		ug/L	0.0020
05/24/2021 18:04	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
<b>202105200579      <u>IX-1-20210520</u></b>						
05/24/2021 18:24	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
05/24/2021 18:24	Perfluorooctanoic acid (PFOA)		0.0052		ug/L	0.0020
<b>202105200580      <u>IX-2-20210520</u></b>						
05/24/2021 18:33	Perfluoroheptanoic acid (PFHpA)		0.0023		ug/L	0.0020
05/24/2021 18:33	Perfluorohexanoic acid (PFHxA)		0.0045		ug/L	0.0020
05/24/2021 18:33	Perfluorooctanoic acid (PFOA)		0.0060		ug/L	0.0020
<b>202105200581      <u>IX-3-20210520</u></b>						
05/24/2021 18:43	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
05/24/2021 18:43	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
05/24/2021 18:43	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
<b>202105200582      <u>IX-4-20210520</u></b>						
05/24/2021 18:53	Perfluoroheptanoic acid (PFHpA)		0.0024		ug/L	0.0020
05/24/2021 18:53	Perfluorohexanoic acid (PFHxA)		0.0045		ug/L	0.0020
05/24/2021 18:53	Perfluorooctanoic acid (PFOA)		0.0062		ug/L	0.0020
<b>202105200583      <u>GAC-1M-20210520</u></b>						
05/24/2021 19:02	Perfluorobutanesulfonic acid (PFBS)		0.0063		ug/L	0.0020
05/24/2021 19:02	Perfluorohexanesulfonic acid (PFHxS)		0.0037		ug/L	0.0020
05/24/2021 19:02	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
05/24/2021 19:02	Perfluorooctanesulfonic acid (PFOS)		0.010		ug/L	0.0020
05/24/2021 19:02	Perfluorooctanoic acid (PFOA)		0.0093		ug/L	0.0020
<b>202105200584      <u>GAC-2M-20210520</u></b>						
05/24/2021 19:23	Perfluorobutanesulfonic acid (PFBS)		0.0051		ug/L	0.0020
05/24/2021 19:23	Perfluorohexanesulfonic acid (PFHxS)		0.0027		ug/L	0.0020
05/24/2021 19:23	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
05/24/2021 19:23	Perfluorooctanoic acid (PFOA)		0.0062		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202105200585      <u>GAC-3M-20210520</u></b>						
05/24/2021 19:34	Perfluorobutanesulfonic acid (PFBS)		0.0059		ug/L	0.0020
05/24/2021 19:34	Perfluorohexanesulfonic acid (PFHxS)		0.0043		ug/L	0.0020
05/24/2021 19:34	Perfluorohexanoic acid (PFHxA)		0.0039		ug/L	0.0020
05/24/2021 19:34	Perfluorooctanesulfonic acid (PFOS)		0.010		ug/L	0.0020
05/24/2021 19:34	Perfluorooctanoic acid (PFOA)		0.0094		ug/L	0.0020
<b>202105200586      <u>GAC-4M-20210520</u></b>						
05/24/2021 19:44	Perfluorobutanesulfonic acid (PFBS)		0.0028		ug/L	0.0020
05/24/2021 19:44	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
05/24/2021 19:44	Perfluorooctanesulfonic acid (PFOS)		0.0035		ug/L	0.0020
05/24/2021 19:44	Perfluorooctanoic acid (PFOA)		0.0031		ug/L	0.0020
<b>202105200587      <u>IX-1M-20210520</u></b>						
05/24/2021 19:53	Perfluorobutanesulfonic acid (PFBS)		0.0023		ug/L	0.0020
05/24/2021 19:53	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
05/24/2021 19:53	Perfluorooctanesulfonic acid (PFOS)		0.0057		ug/L	0.0020
05/24/2021 19:53	Perfluorooctanoic acid (PFOA)		0.0080		ug/L	0.0020
<b>202105200588      <u>IX-2M-20210520</u></b>						
05/24/2021 20:03	Perfluorobutanesulfonic acid (PFBS)		0.0020		ug/L	0.0020
05/24/2021 20:03	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
05/24/2021 20:03	Perfluorooctanesulfonic acid (PFOS)		0.0026		ug/L	0.0020
05/24/2021 20:03	Perfluorooctanoic acid (PFOA)		0.0086		ug/L	0.0020
<b>202105200589      <u>IX-3M-20210520</u></b>						
05/24/2021 20:12	Perfluorobutanesulfonic acid (PFBS)		0.0037		ug/L	0.0020
05/24/2021 20:12	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
05/24/2021 20:12	Perfluorooctanesulfonic acid (PFOS)		0.0042		ug/L	0.0020
05/24/2021 20:12	Perfluorooctanoic acid (PFOA)		0.0087		ug/L	0.0020
<b>202105200590      <u>IX-4M-20210520</u></b>						
05/24/2021 20:22	Perfluorobutanesulfonic acid (PFBS)		0.0043		ug/L	0.0020
05/24/2021 20:22	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
05/24/2021 20:22	Perfluorohexanesulfonic acid (PFHxS)		0.0020		ug/L	0.0020
05/24/2021 20:22	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
05/24/2021 20:22	Perfluorononanoic acid (PFNA)		0.0023		ug/L	0.0020
05/24/2021 20:22	Perfluorooctanesulfonic acid (PFOS)		0.0061		ug/L	0.0020
05/24/2021 20:22	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
<b>202105200592      <u>LH-INF-20210520</u></b>						

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
05/26/2021 23:44	Alkalinity in CaCO3 units		200		mg/L	2.0
05/26/2021 21:18	Arsenic Total ICAP/MS		2.7	10	ug/L	1.0
06/01/2021 12:47	Calcium Total ICAP		110		mg/L	1.0
05/21/2021 04:33	Chloride		100	250	mg/L	2.5
05/28/2021 1:59	Chloroform (Trichloromethane)		0.81		ug/L	0.50
06/07/2021 21:35	Dissolved Organic Carbon		0.84		mg/L	0.20
05/30/2021 15:51	Hexavalent chromium(Dissolved)		0.74		ug/L	0.020
06/01/2021 12:47	Magnesium Total ICAP		21		mg/L	0.10
05/21/2021 04:33	Nitrate as Nitrogen by IC		3.0	10	mg/L	0.50
05/21/2021 04:33	Nitrate as NO3 (calc)		13	45	mg/L	2.2
05/24/2021 20:32	Perfluorobutanesulfonic acid (PFBS)		0.0069		ug/L	0.0020
05/24/2021 20:32	Perfluorohexanesulfonic acid (PFHxS)		0.0061		ug/L	0.0020
05/24/2021 20:32	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
05/24/2021 20:32	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
05/24/2021 20:32	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
05/24/2021 20:32	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
06/01/2021 12:47	Potassium Total ICAP		4.6		mg/L	1.0
06/01/2021 12:47	Sodium Total ICAP		71		mg/L	1.0
05/21/2021 04:33	Sulfate		160	250	mg/L	2.5
05/26/2021 22:31	Total Dissolved Solids (TDS)		650	500	mg/L	10
06/01/2021 15:27	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
05/21/2021 04:33	Total Nitrate, Nitrite-N, CALC		3.0		mg/L	0.10
05/29/2021 02:12	Total Organic Carbon		1.1		mg/L	0.20
05/28/2021 1:59	Total THM		0.81	80	ug/L	0.50
05/27/2021 14:28	Uranium by ICPMS as pCi/L		3.4		pCi/L	0.70
05/26/2021 21:18	Uranium ICAP/MS		5.2	30	ug/L	1.0

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20210520 (202105200575)</b>					<b>Sampled on 05/20/2021 0933</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0026	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	13C2-PFDA	91	%	1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	13C2-PFHxA	101	%	1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	119	%	1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	89	%	1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	99	%	1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	94	%	1
05/21/21	05/24/21	17:45	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	106	%	1

<b>GAC-2-20210520 (202105200576)</b>					<b>Sampled on 05/20/2021 0936</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
05/21/21	05/24/21	17:55	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020 1
05/21/21	05/24/21	17:55	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020 1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0053	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	13C2-PFDA	90	%		1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	13C2-PFHxA	100	%		1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	89	%		1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	94	%		1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	107	%		1

**GAC-3-20210520 (202105200577)**

Sampled on 05/20/2021 0939

**EPA 537.1 - EPA Method 537.1**

05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0061	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	13C2-PFDA	91	%		1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	13C2-PFHxA	105	%		1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	90	%		1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	95	%		1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**GAC-4-20210520 (202105200578)**

**Sampled on 05/20/2021 0942**

**EPA 537.1 - EPA Method 537.1**

05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	13C2-PFDA	93	%		1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	13C2-PFHxA	101	%		1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	84	%		1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	101	%		1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	101	%		1

**IX-1-20210520 (202105200579)**

Sampled on 05/20/2021 0945

**EPA 537.1 - EPA Method 537.1**

05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0052	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	13C2-PFDA	108	%		1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	13C2-PFHxA	112	%		1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	103	%		1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	97	%		1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	110	%		1

**IX-2-20210520 (202105200580)**

**Sampled on 05/20/2021 0948**

**EPA 537.1 - EPA Method 537.1**

05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0023	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0045	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0060	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	13C2-PFDA	102	%		1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	13C2-PFHxA	114	%		1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	103	%		1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	95	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	104	%		1
<b>IX-3-20210520 (202105200581)</b>					<b>Sampled on 05/20/2021 0951</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	13C2-PFDA	100	%		1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	13C2-PFHxA	109	%		1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	95	%		1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	99	%		1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**IX-4-20210520 (202105200582)**

**Sampled on 05/20/2021 0954**

**EPA 537.1 - EPA Method 537.1**

05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0024	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0045	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0062	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	13C2-PFDA	100	%		1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	13C2-PFHxA	107	%		1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	94	%		1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	97	%		1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	d5-NETFOSAA	107	%		1

**GAC-1M-20210520 (202105200583)**

Sampled on 05/20/2021 0957

**EPA 537.1 - EPA Method 537.1**

05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	11-chloroeicosaufluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0063	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0037	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.010	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0093	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	13C2-PFDA	99	%		1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	13C2-PFHxA	113	%		1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	103	%		1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	96	%		1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**GAC-2M-20210520 (202105200584)**

**Sampled on 05/20/2021 1000**

**EPA 537.1 - EPA Method 537.1**

05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0051	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0027	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0062	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	13C2-PFDA	102	%		1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	13C2-PFHxA	111	%		1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	102	%		1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	94	%		1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**GAC-3M-20210520 (202105200585)**

**Sampled on 05/20/2021 1003**

**EPA 537.1 - EPA Method 537.1**

05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0059	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0043	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.010	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0094	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	13C2-PFDA	107	%		1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	13C2-PFHxA	116	%		1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	104	%		1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	96	%		1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**GAC-4M-20210520 (202105200586)**

**Sampled on 05/20/2021 1006**

**EPA 537.1 - EPA Method 537.1**

05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0028	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0035	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0031	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	13C2-PFDA	90	%		1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	13C2-PFHxA	112	%		1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	102	%		1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	94	%		1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	90	%		1
<b>IX-1M-20210520 (202105200587)</b>					<b>Sampled on 05/20/2021 1009</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0023	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0057	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0080	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	13C2-PFDA	103	%		1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	13C2-PFHxA	115	%		1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	103	%		1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	97	%		1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	109	%		1

**IX-2M-20210520 (202105200588)**

**Sampled on 05/20/2021 1012**

**EPA 537.1 - EPA Method 537.1**

05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0020	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0026	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0086	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	13C2-PFDA	107	%		1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	13C2-PFHxA	107	%		1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	101	%		1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	95	%		1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	d5-NETFOSAA	109	%		1

**IX-3M-20210520 (202105200589)**

Sampled on 05/20/2021 1015

**EPA 537.1 - EPA Method 537.1**

05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	4,8-dioxo-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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**Report:** 936465  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0037	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0042	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0087	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	13C2-PFDA	106	%		1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	13C2-PFHxA	114	%		1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	104	%		1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	96	%		1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	111	%		1

**IX-4M-20210520 (202105200590)**

**Sampled on 05/20/2021 1018**

**EPA 537.1 - EPA Method 537.1**

05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0043	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0020	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0023	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0061	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	13C2-PFDA	108	%		1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	13C2-PFHxA	116	%		1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	105	%		1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	95	%		1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	d5-NEFOSAA	111	%		1

**LH-INF-20210520 (202105200592)**

**Sampled on 05/20/2021 1021**

**EPA 200.8 - ICPMS Metals**

05/21/21	05/26/21 21:18	1329489	1330338	(EPA 200.8)	Arsenic Total ICAP/MS	2.7	ug/L	1.0	1
05/21/21	05/26/21 21:18	1329489	1330338	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
05/21/21	05/26/21 21:18	1329489	1330338	(EPA 200.8)	Uranium ICAP/MS	5.2	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

05/21/21	06/01/21 12:47	1329489	1331521	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
05/21/21	06/01/21 12:47	1329489	1331521	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.010	1
05/21/21	06/01/21 12:47	1329489	1331521	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
05/21/21	06/01/21 12:47	1329489	1331521	(EPA 200.7)	Potassium Total ICAP	4.6	mg/L	1.0	1
05/21/21	06/01/21 12:47	1329489	1331521	(EPA 200.7)	Sodium Total ICAP	71	mg/L	1.0	1

**SM 5310C - Total Organic Carbon**

	05/29/21 02:12		1331117	(SM 5310C)	Total Organic Carbon	1.1	mg/L	0.20	1
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**SM 5310C - Dissolved Organic Carbon**

06/03/21	06/07/21 21:35	1332072	1332949	(SM 5310C)	Dissolved Organic Carbon	0.84 (B4,HA)	mg/L	0.20	1
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**EPA 200.8 - Uranium by ICPMS as pCi/L**

	05/27/21 14:28			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.4 (c)	pCi/L	0.70	1
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**SM 2340B - Total Hardness as CaCO3 by ICP**

	06/01/21 15:27			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
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**EPA 218.6 - Hexavalent chromium(Dissolved)**

	05/30/21 15:51		1330419	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.74	ug/L	0.020	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

	05/21/21 04:33		1329392	(EPA 300.0)	Nitrate as Nitrogen by IC	3.0	mg/L	0.50	5
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Rounding on totals after summation.  
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Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	05/21/21 04:33		1329392	(EPA 300.0)	Nitrate as NO3 (calc)	13	mg/L	2.2	5
	05/21/21 04:33		1329392	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	05/21/21 04:33		1329392	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	3.0	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	05/21/21 04:33		1329393	(EPA 300.0)	Chloride	100	mg/L	2.5	5
	05/21/21 04:33		1329393	(EPA 300.0)	Sulfate	160	mg/L	2.5	5
<b>EPA 314.0 - Perchlorate with 2 ug/L MRL</b>									
	05/26/21 22:19	(1)	1330530	(EPA 314.0)	Perchlorate- Low Level	ND	ug/L	2.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0069	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0061	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	13C2-PFDA	100	%		1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	13C2-PFHxA	112	%		1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	101	%		1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	94	%		1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	d5-NetFOSAA	108	%		1

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Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	05/26/21 09:19			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	1	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Chloroform (Trichloromethane)	0.81	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1

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05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Dibromomethane	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Dichlorodifluoromethane	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Dichloromethane	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Di-isopropyl ether	ND	ug/L	3.0	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Ethyl benzene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Hexachlorobutadiene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Isopropylbenzene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) m,p-Xylenes	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Naphthalene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) n-Butylbenzene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) n-Propylbenzene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) o-Chlorotoluene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) o-Xylene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) p-Chlorotoluene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) p-Isopropyltoluene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) sec-Butylbenzene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Styrene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) tert-amyl Methyl Ether	ND	ug/L	3.0	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) tert-Butylbenzene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Toluene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Total 1,3-Dichloropropene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Total THM	0.81	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Total xylenes	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) trans-1,3-Dichloropropene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Trichloroethylene (TCE)	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Trichlorofluoromethane	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Vinyl chloride (VC)	ND	ug/L	0.30	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) 1,2-Dichloroethane-d4	118	%		1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) 4-Bromofluorobenzene	98	%		1

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**Water Replenishment District**

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 4040 Paramount Blvd.  
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 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Toluene-d8	83	%		1
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	05/26/21 23:44		1330508	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
05/26/21	05/26/21 22:31	1330586	1330591	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	650	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	05/26/21 21:11		1330631	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1

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Water Replenishment District

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1329392**

202105200592 LH-INF-20210520

**Analysis Date: 05/21/2021**

Analyzed by: HL7J

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1329393**

202105200592 LH-INF-20210520

**Analysis Date: 05/21/2021**

Analyzed by: HL7J

**EPA Method 537.1**

**Prep Batch: 1329480 Analytical Batch: 1330214**

202105200575 GAC-1-20210520

202105200576 GAC-2-20210520

202105200577 GAC-3-20210520

202105200578 GAC-4-20210520

202105200579 IX-1-20210520

202105200580 IX-2-20210520

202105200581 IX-3-20210520

202105200582 IX-4-20210520

202105200583 GAC-1M-20210520

202105200584 GAC-2M-20210520

202105200585 GAC-3M-20210520

202105200586 GAC-4M-20210520

202105200587 IX-1M-20210520

202105200588 IX-2M-20210520

202105200589 IX-3M-20210520

202105200590 IX-4M-20210520

202105200592 LH-INF-20210520

**Analysis Date: 05/24/2021**

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

**ICPMS Metals**

**Prep Batch: 1329489 Analytical Batch: 1330338**

202105200592 LH-INF-20210520

**Analysis Date: 05/26/2021**

Analyzed by: AZS

**Hexavalent chromium(Dissolved)**

**Analytical Batch: 1330419**

202105200592 LH-INF-20210520

**Analysis Date: 05/30/2021**

Analyzed by: LMR

**Alkalinity in CaCO3 units**

**Analytical Batch: 1330508**

202105200592 LH-INF-20210520

**Analysis Date: 05/26/2021**

Analyzed by: P6LW

**Perchlorate with 2 ug/L MRL**

**Analytical Batch: 1330530**

202105200592 LH-INF-20210520

**Analysis Date: 05/26/2021**

Analyzed by: H5VG

**Total Dissolved Solids (TDS)**

**Prep Batch: 1330586 Analytical Batch: 1330591**

202105200592 LH-INF-20210520

**Analysis Date: 05/26/2021**

Analyzed by: JRF

Water Replenishment District

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**Total Suspended Solids (TSS)****Analytical Batch: 1330631**

202105200592 LH-INF-20210520

**Analysis Date: 05/26/2021**

Analyzed by: JRF

**Volatile Organics by GCMS****Prep Batch: 1331034 Analytical Batch: 1331037**

202105200592 LH-INF-20210520

**Analysis Date: 05/28/2021**

Analyzed by: TR7W

**Total Organic Carbon****Analytical Batch: 1331117**

202105200592 LH-INF-20210520

**Analysis Date: 05/29/2021**

Analyzed by: TLL7

**ICP Metals****Prep Batch: 1329489 Analytical Batch: 1331521**

202105200592 LH-INF-20210520

**Analysis Date: 06/01/2021**

Analyzed by: NINA

**Dissolved Organic Carbon****Prep Batch: 1332072 Analytical Batch: 1332949**

202105200592 LH-INF-20210520

**Analysis Date: 06/07/2021**

Analyzed by: TLL7

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Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
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**Nitrate, Nitrite by EPA 300.0 by EPA 300.0**

**Analytical Batch: 1329392**

**Analysis Date: 05/21/2021**

LCS1	Nitrate as Nitrogen by IC		2.5	2.47	mg/L	99	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.46	mg/L	98	(90-110)	20	0.41
MBLK	Nitrate as Nitrogen by IC			<0.0042	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0475	mg/L	95	(50-150)		
MS_202105200592	Nitrate as Nitrogen by IC	3.0	1.3	9.54	mg/L	104	(80-120)		
MSD_202105200592	Nitrate as Nitrogen by IC	3.0	1.3	9.60	mg/L	105	(80-120)	20	0.57
LCS1	Nitrite Nitrogen by IC		1	0.963	mg/L	96	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.959	mg/L	96	(90-110)	20	0.42
MBLK	Nitrite Nitrogen by IC			<0.0050	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0439	mg/L	88	(50-150)		
MS_202105200592	Nitrite Nitrogen by IC	ND	0.5	2.40	mg/L	96	(80-120)		
MSD_202105200592	Nitrite Nitrogen by IC	ND	0.5	2.42	mg/L	97	(80-120)	20	0.96

**Chloride, Sulfate by EPA 300.0 by EPA 300.0**

**Analytical Batch: 1329393**

**Analysis Date: 05/21/2021**

LCS1	Chloride		25	25.5	mg/L	102	(90-110)		
LCS2	Chloride		25	25.4	mg/L	101	(90-110)	20	0.39
MBLK	Chloride			<0.1397	mg/L				
MRL_CHK	Chloride		0.5	0.431	mg/L	86	(50-150)		
MS_202105200592	Chloride	100	13	171	mg/L	106	(80-120)		
MSD_202105200592	Chloride	100	13	172	mg/L	107	(80-120)	20	0.30
LCS1	Sulfate		50	51.1	mg/L	102	(90-110)		
LCS2	Sulfate		50	50.9	mg/L	102	(90-110)	20	0.39
MBLK	Sulfate			<0.0614	mg/L				
MRL_CHK	Sulfate		1	0.935	mg/L	94	(50-150)		
MRL_LW	Sulfate		0.25	0.235	mg/L	94	(50-150)		
MS_202105200592	Sulfate	160	25	299	mg/L	108	(80-120)		
MSD_202105200592	Sulfate	160	25	300	mg/L	109	(80-120)	20	0.37

**EPA Method 537.1 by EPA 537.1**

**Prep Batch: 1329480 Analytical Batch: 1330214**

**Analysis Date: 05/24/2021**

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0233	ug/L	99	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0234	ug/L	99	(70-130)	30	0.43
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00185	ug/L	98	(50-150)		
MS_202105190093	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00193	ug/L	103	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



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 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202105190093	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00202	ug/L	107	(50-150)	50	4.6
LCS1	13C2-PFDA (S)		100	102	%	103	(70-130)		
LCS2	13C2-PFDA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFDA (S)			99.0	%	99	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	102	%	103	(70-130)		
MS_202105190093	13C2-PFDA (S)		100	104	%	104	(70-130)		
MSD_202105190093	13C2-PFDA (S)		100	98.6	%	99	(70-130)		
LCS1	13C2-PFHxA (S)		100	107	%	107	(70-130)		
LCS2	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFHxA (S)			96.4	%	96	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	104	%	104	(70-130)		
MS_202105190093	13C2-PFHxA (S)		100	112	%	112	(70-130)		
MSD_202105190093	13C2-PFHxA (S)		100	105	%	105	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	97.9	%	98	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	100	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			103	%	103	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MS_202105190093	13C2-PFOA- IS#1 (I)		100	104	%	105	(50-150)		
MSD_202105190093	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	99.0	%	99	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	98.5	%	98	(70-130)		
MBLK	13C3-HFPO-DA (S)			91.3	%	91	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	95.3	%	95	(70-130)		
MS_202105190093	13C3-HFPO-DA (S)		100	97.9	%	98	(70-130)		
MSD_202105190093	13C3-HFPO-DA (S)		100	95.0	%	95	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	96.8	%	97	(50-150)		
MS_202105190093	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MSD_202105190093	13C4-PFOS- IS#2 (I)		100	97.4	%	97	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0272	ug/L	115	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0259	ug/L	110	(70-130)	30	4.9
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00216	ug/L	114	(50-150)		
MS_202105190093	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00219	ug/L	116	(50-150)		
MSD_202105190093	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00205	ug/L	108	(50-150)	50	6.5
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0240	ug/L	103	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0240	ug/L	103	(70-130)	30	0.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00198	ug/L	107	(50-150)		
MS_202105190093	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00190	ug/L	102	(50-150)		
MSD_202105190093	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00199	ug/L	107	(50-150)	50	4.6
LCS1	d3-NMeFOSAA (I)		100	87.9	%	88	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	86.2	%	86	(50-150)		
MBLK	d3-NMeFOSAA (I)			87.0	%	87	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	88.8	%	89	(50-150)		
MS_202105190093	d3-NMeFOSAA (I)		100	94.5	%	94	(50-150)		
MSD_202105190093	d3-NMeFOSAA (I)		100	91.1	%	91	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	104	%	104	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	110	%	110	(70-130)		
MBLK	d5-NEtFOSAA (S)			104	%	104	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	106	%	107	(70-130)		
MS_202105190093	d5-NEtFOSAA (S)		100	103	%	103	(70-130)		
MSD_202105190093	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0245	ug/L	98	(70-130)	30	2.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00196	ug/L	98	(50-150)		
MS_202105190093	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00196	ug/L	98	(50-150)		
MSD_202105190093	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00190	ug/L	95	(50-150)	50	3.0
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0277	ug/L	111	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0282	ug/L	113	(70-130)	30	1.8
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00216	ug/L	108	(50-150)		
MS_202105190093	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00208	ug/L	104	(50-150)		
MSD_202105190093	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00219	ug/L	110	(50-150)	50	5.3
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0262	ug/L	105	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0266	ug/L	106	(70-130)	30	1.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00202	ug/L	101	(50-150)		
MS_202105190093	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00213	ug/L	107	(50-150)		
MSD_202105190093	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00205	ug/L	103	(50-150)	50	3.9
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0201	ug/L	91	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0200	ug/L	90	(70-130)	30	0.50
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00161	ug/L	91	(50-150)		
MS_202105190093	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00182	ug/L	103	(50-150)		
MSD_202105190093	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00176	ug/L	99	(50-150)	50	3.1
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0243	ug/L	97	(70-130)	30	7.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00197	ug/L	99	(50-150)		
MS_202105190093	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00202	ug/L	101	(50-150)		
MSD_202105190093	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00206	ug/L	103	(50-150)	50	1.7
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0273	ug/L	109	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0257	ug/L	103	(70-130)	30	6.0
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202105190093	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00209	ug/L	105	(50-150)		
MSD_202105190093	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00204	ug/L	102	(50-150)	50	2.6
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0294	ug/L	118	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0283	ug/L	113	(70-130)	30	3.8
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00229	ug/L	115	(50-150)		
MS_202105190093	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00232	ug/L	116	(50-150)		
MSD_202105190093	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00226	ug/L	113	(50-150)	50	2.5
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0255	ug/L	112	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0253	ug/L	111	(70-130)	30	0.79
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00202	ug/L	111	(50-150)		
MS_202105190093	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00205	ug/L	112	(50-150)		
MSD_202105190093	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00205	ug/L	112	(50-150)	50	0.0088
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0271	ug/L	108	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0269	ug/L	108	(70-130)	30	0.74
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202105190093	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00222	ug/L	106	(50-150)		
MSD_202105190093	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00214	ug/L	102	(50-150)	50	3.7
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0273	ug/L	109	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0265	ug/L	106	(70-130)	30	3.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00226	ug/L	113	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202105190093	Perfluorononanoic acid (PFNA)	ND	0.002	0.00218	ug/L	109	(50-150)		
MSD_202105190093	Perfluorononanoic acid (PFNA)	ND	0.002	0.00214	ug/L	107	(50-150)	50	1.7
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0256	ug/L	111	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0258	ug/L	112	(70-130)	30	0.78
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00212	ug/L	115	(50-150)		
MS_202105190093	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00203	ug/L	110	(50-150)		
MSD_202105190093	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00216	ug/L	117	(50-150)	50	6.1
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0284	ug/L	114	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0270	ug/L	108	(70-130)	30	5.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00231	ug/L	116	(50-150)		
MS_202105190093	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00228	ug/L	109	(50-150)		
MSD_202105190093	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00220	ug/L	105	(50-150)	50	3.4
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0254	ug/L	102	(70-130)	30	4.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00213	ug/L	106	(50-150)		
MS_202105190093	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00223	ug/L	107	(50-150)		
MSD_202105190093	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00229	ug/L	110	(50-150)	50	2.6
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0246	ug/L	98	(70-130)	30	1.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00198	ug/L	99	(50-150)		
MS_202105190093	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00195	ug/L	98	(50-150)		
MSD_202105190093	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00195	ug/L	97	(50-150)	50	0.092
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0255	ug/L	102	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0255	ug/L	102	(70-130)	30	0.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00195	ug/L	97	(50-150)		
MS_202105190093	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00198	ug/L	99	(50-150)		
MSD_202105190093	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00197	ug/L	98	(50-150)	50	0.60

ICPMS Metals by EPA 200.8

Analytical Batch: 1330338

Analysis Date: 05/26/2021

LCS1	Arsenic Total ICAP/MS		50	49.7	ug/L	99	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	50.4	ug/L	101	(85-115)	20	1.4
MBLK	Arsenic Total ICAP/MS			<0.4134	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Arsenic Total ICAP/MS		1	1.06	ug/L	106	(50-150)		
MS_202105200336	Arsenic Total ICAP/MS	9.7	50	59.1	ug/L	99	(70-130)		
MS2_202105200681	Arsenic Total ICAP/MS	ND	50	47.2	ug/L	95	(70-130)		
MSD_202105200336	Arsenic Total ICAP/MS	9.7	50	60.8	ug/L	102	(70-130)	20	2.8
MSD2_202105200681	Arsenic Total ICAP/MS	ND	50	49.8	ug/L	100	(70-130)	20	5.3
LCS1	Manganese Total ICAP/MS		100	103	ug/L	103	(85-115)		
LCS2	Manganese Total ICAP/MS		100	104	ug/L	104	(85-115)	20	0.97
MBLK	Manganese Total ICAP/MS			<0.4606	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.05	ug/L	103	(50-150)		
MS_202105200336	Manganese Total ICAP/MS	ND	100	97.5	ug/L	97	(70-130)		
MS2_202105200681	Manganese Total ICAP/MS	ND	100	96.1	ug/L	96	(70-130)		
MSD_202105200336	Manganese Total ICAP/MS	ND	100	103	ug/L	103	(70-130)	20	5.5
MSD2_202105200681	Manganese Total ICAP/MS	ND	100	99.6	ug/L	100	(70-130)	20	3.6
LCS1	Uranium ICAP/MS		50	52.4	ug/L	105	(85-115)		
LCS2	Uranium ICAP/MS		50	53.2	ug/L	106	(85-115)	20	1.5
MBLK	Uranium ICAP/MS			<0.0872	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.997	ug/L	100	(50-150)		
MS_202105200336	Uranium ICAP/MS	2.6	50	57.7	ug/L	110	(70-130)		
MS2_202105200681	Uranium ICAP/MS	ND	50	51.9	ug/L	104	(70-130)		
MSD_202105200336	Uranium ICAP/MS	2.6	50	59.7	ug/L	114	(70-130)	20	3.5
MSD2_202105200681	Uranium ICAP/MS	ND	50	54.1	ug/L	108	(70-130)	20	4.1

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1330419

Analysis Date: 05/30/2021

LCS1	Hexavalent chromium(Dissolved)		2	1.96	ug/L	98	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.95	ug/L	97	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0117	ug/L	59	(50-150)		
MS_202105200592	Hexavalent chromium(Dissolved)	0.74	2	2.80	ug/L	103	(90-110)		
MS_202105210635	Hexavalent chromium(Dissolved)	3.6	2	5.62	ug/L	101	(90-110)		
MSD_202105200592	Hexavalent chromium(Dissolved)	0.74	2	2.82	ug/L	104	(90-110)	20	0.82
MSD_202105210635	Hexavalent chromium(Dissolved)	3.6	2	5.67	ug/L	103	(90-110)	20	0.78

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1330508

Analysis Date: 05/26/2021

LCS1	Alkalinity in CaCO3 units		100	102	mg/L	102	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	102	mg/L	102	(90-110)	20	0.0
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.30	mg/L	115	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202105190227	Alkalinity in CaCO3 units	78	100	185	mg/L	107	(80-120)		
MS_202105190406	Alkalinity in CaCO3 units	200	100	305	mg/L	104	(80-120)		
MSD_202105190227	Alkalinity in CaCO3 units	78	100	186	mg/L	108	(80-120)	20	0.58
MSD_202105190406	Alkalinity in CaCO3 units	200	100	305	mg/L	104	(80-120)	20	0.11

Perchlorate with 2 ug/L MRL by EPA 314.0

Analytical Batch: 1330530

Analysis Date: 05/26/2021

LCS1	Perchlorate- Low Level		10	10.1	ug/L	101	(85-115)		
LCS2	Perchlorate- Low Level		10	10.1	ug/L	101	(85-115)	15	0.0
MBLK	Perchlorate- Low Level			<1	ug/L				
MRL_CHK	Perchlorate- Low Level		2	1.92	ug/L	96	(75-125)		
MS2_202105200397	Perchlorate- Low Level	ND	10	9.12	ug/L	91	(80-120)		
MSD2_202105200397	Perchlorate- Low Level	ND	10	10.3	ug/L	103	(80-120)	15	12

Total Dissolved Solids (TDS) by E160.1/SM2540C

Analytical Batch: 1330591

Analysis Date: 05/26/2021

DUP_202103260300	Total Dissolved Solid (TDS)	300		302	mg/L		(0-10)	10	0.66
DUP_202105200537	Total Dissolved Solid (TDS)	550		552	mg/L		(0-10)	10	1.1
LCS1	Total Dissolved Solid (TDS)		175	188	mg/L	107	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	704	mg/L	101	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	13.0	mg/L	130	(50-150)		

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1330631

Analysis Date: 05/26/2021

DUP_202104140066	Total Suspended Solids (TSS)	96		92.0	mg/L		(0-10)	10	4.3
DUP_202104140087	Total Suspended Solids (TSS)			300	mg/L		(0-10)	10	<u>25</u>
LCS1	Total Suspended Solids (TSS)		175	156	mg/L	89	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	170	mg/L	97	(71-107)	20	8.6
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	13.0	mg/L	130	(50-150)		

Volatile Organics by GCMS by EPA 524.2

Analytical Batch: 1331037

Analysis Date: 05/27/2021

LCS1	1,1,1,2-Tetrachloroethane		5	4.56	ug/L	91	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	4.88	ug/L	98	(70-130)	20	6.8
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.66	ug/L	93	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	1,1,1-Trichloroethane		5	4.95	ug/L	99	(70-130)	20	6.0
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	4.71	ug/L	94	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	4.84	ug/L	97	(70-130)	20	2.7
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.56	ug/L	91	(70-130)		
LCS2	1,1,2-Trichloroethane		5	4.90	ug/L	98	(70-130)	20	7.2
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.560	ug/L	112	(50-150)		
LCS1	1,1-Dichloroethane		5	4.75	ug/L	95	(70-130)		
LCS2	1,1-Dichloroethane		5	5.05	ug/L	101	(70-130)	20	6.1
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	1,1-Dichloroethylene		5	4.80	ug/L	96	(70-130)		
LCS2	1,1-Dichloroethylene		5	5.03	ug/L	101	(70-130)	20	4.7
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.630	ug/L	126	(50-150)		
LCS1	1,1-Dichloropropene		5	4.53	ug/L	91	(70-130)		
LCS2	1,1-Dichloropropene		5	4.78	ug/L	96	(70-130)	20	5.4
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.80	ug/L	96	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	5.16	ug/L	103	(70-130)	20	7.2
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.620	ug/L	124	(50-150)		
LCS1	1,2,3-Trichloropropane		5	4.63	ug/L	93	(70-130)		
LCS2	1,2,3-Trichloropropane		5	4.68	ug/L	94	(70-130)	20	1.1
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.570	ug/L	114	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.30	ug/L	86	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	4.74	ug/L	95	(70-130)	20	9.7
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.600	ug/L	120	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	5.29	ug/L	106	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	5.42	ug/L	108	(70-130)	20	2.4
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	1,2-Dichloroethane		5	4.57	ug/L	91	(70-130)		
LCS2	1,2-Dichloroethane		5	4.65	ug/L	93	(70-130)	20	1.7
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	96.0	%	96	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	98.6	%	99	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			112	%	112	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	97.8	%	98	(70-130)		
LCS1	1,2-Dichloropropane		5	4.66	ug/L	93	(70-130)		
LCS2	1,2-Dichloropropane		5	4.85	ug/L	97	(70-130)	20	4.0
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	5.21	ug/L	104	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	5.33	ug/L	107	(70-130)	20	2.3
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.440	ug/L	88	(50-150)		
LCS1	1,3-Dichloropropane		5	4.45	ug/L	89	(70-130)		
LCS2	1,3-Dichloropropane		5	4.83	ug/L	97	(70-130)	20	8.2
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.530	ug/L	106	(50-150)		
LCS1	2,2-Dichloropropane		5	4.01	ug/L	80	(70-130)		
LCS2	2,2-Dichloropropane		5	3.81	ug/L	76	(70-130)	20	5.1
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.510	ug/L	102	(50-150)		
LCS1	2-Butanone (MEK)		50	42.8	ug/L	86	(70-130)		
LCS2	2-Butanone (MEK)		50	45.3	ug/L	91	(70-130)	20	5.7
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.66	ug/L	113	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	105	%	105	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	100	%	100	(70-130)		
MBLK	4-Bromofluorobenzene (S)			99.6	%	100	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	98.8	%	99	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	99.8	%	100	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	47.6	ug/L	95	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	50.6	ug/L	101	(70-130)	20	6.1
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.89	ug/L	98	(50-150)		
LCS1	Benzene		5	4.74	ug/L	95	(70-130)		
LCS2	Benzene		5	4.98	ug/L	100	(70-130)	20	4.9
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.530	ug/L	106	(50-150)		
LCS1	Bromobenzene		5	4.71	ug/L	94	(70-130)		
LCS2	Bromobenzene		5	4.84	ug/L	97	(70-130)	20	2.7
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.540	ug/L	108	(50-150)		
LCS1	Bromochloromethane		5	4.52	ug/L	90	(70-130)		
LCS2	Bromochloromethane		5	4.64	ug/L	93	(70-130)	20	2.6
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	Bromodichloromethane		5	4.46	ug/L	89	(70-130)		
LCS2	Bromodichloromethane		5	4.59	ug/L	92	(70-130)	20	2.9
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	Bromoethane		5	4.53	ug/L	91	(70-130)		
LCS2	Bromoethane		5	4.81	ug/L	96	(70-130)	20	6.0
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.630	ug/L	126	(50-150)		
LCS1	Bromoform		5	4.97	ug/L	99	(70-130)		
LCS2	Bromoform		5	4.81	ug/L	96	(70-130)	20	3.3
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.570	ug/L	114	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	4.79	ug/L	96	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.09	ug/L	102	(70-130)	20	6.1
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.600	ug/L	120	(50-150)		
LCS1	Carbon disulfide		5	4.58	ug/L	92	(70-130)		
LCS2	Carbon disulfide		5	4.78	ug/L	96	(70-130)	20	4.3
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.550	ug/L	110	(50-150)		
LCS1	Carbon Tetrachloride		5	4.61	ug/L	92	(70-130)		
LCS2	Carbon Tetrachloride		5	4.85	ug/L	97	(70-130)	20	5.1
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.540	ug/L	108	(50-150)		
LCS1	Chlorobenzene		5	4.68	ug/L	94	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Chlorobenzene		5	5.03	ug/L	101	(70-130)	20	7.2
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.530	ug/L	106	(50-150)		
LCS1	Chlorodibromomethane		5	4.55	ug/L	91	(70-130)		
LCS2	Chlorodibromomethane		5	4.89	ug/L	98	(70-130)	20	7.2
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	Chloroethane		5	4.84	ug/L	97	(70-130)		
LCS2	Chloroethane		5	4.88	ug/L	98	(70-130)	20	0.82
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.590	ug/L	118	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.67	ug/L	93	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	4.90	ug/L	98	(70-130)	20	4.8
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.570	ug/L	114	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.54	ug/L	91	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.64	ug/L	93	(70-130)	20	2.2
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.630	ug/L	126	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.52	ug/L	90	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.71	ug/L	94	(70-130)	20	4.1
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.530	ug/L	106	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.31	ug/L	86	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.49	ug/L	90	(70-130)	20	4.1
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Dibromomethane		5	4.57	ug/L	91	(70-130)		
LCS2	Dibromomethane		5	4.80	ug/L	96	(70-130)	20	4.9
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	Dichlorodifluoromethane		5	4.93	ug/L	99	(70-130)		
LCS2	Dichlorodifluoromethane		5	5.18	ug/L	104	(70-130)	20	5.0
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	Dichloromethane		5	4.78	ug/L	96	(70-130)		
LCS2	Dichloromethane		5	4.99	ug/L	100	(70-130)	20	4.3
MBLK	Dichloromethane			<0.5	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Dichloromethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	Di-isopropyl ether		5	4.41	ug/L	88	(70-130)		
LCS2	Di-isopropyl ether		5	4.67	ug/L	93	(70-130)	20	5.7
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.570	ug/L	114	(50-150)		
LCS1	Ethyl benzene		5	4.80	ug/L	96	(70-130)		
LCS2	Ethyl benzene		5	5.25	ug/L	105	(70-130)	20	9.0
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Hexachlorobutadiene		5	4.70	ug/L	94	(70-130)		
LCS2	Hexachlorobutadiene		5	5.00	ug/L	100	(70-130)	20	6.2
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.720	ug/L	144	(50-150)		
LCS1	Isopropylbenzene		5	5.05	ug/L	101	(70-130)		
LCS2	Isopropylbenzene		5	5.25	ug/L	105	(70-130)	20	3.9
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.450	ug/L	90	(50-150)		
LCS1	m,p-Xylenes		10	10.3	ug/L	103	(70-130)		
LCS2	m,p-Xylenes		10	11.1	ug/L	111	(70-130)	20	7.5
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.900	ug/L	90	(50-150)		
MRLLW	m,p-Xylenes		0.5	0.530	ug/L	106	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.93	ug/L	99	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	5.06	ug/L	101	(70-130)	20	2.6
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	4.61	ug/L	92	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	4.78	ug/L	96	(70-130)	20	3.6
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.590	ug/L	118	(50-150)		
LCS1	Naphthalene		5	4.27	ug/L	85	(70-130)		
LCS2	Naphthalene		5	4.58	ug/L	92	(70-130)	20	7.0
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.480	ug/L	96	(50-150)		
LCS1	n-Butylbenzene		5	4.73	ug/L	95	(70-130)		
LCS2	n-Butylbenzene		5	5.11	ug/L	102	(70-130)	20	7.7
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.520	ug/L	104	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	n-Propylbenzene		5	4.97	ug/L	99	(70-130)		
LCS2	n-Propylbenzene		5	5.18	ug/L	104	(70-130)	20	4.1
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.490	ug/L	98	(50-150)		
LCS1	o-Chlorotoluene		5	4.95	ug/L	99	(70-130)		
LCS2	o-Chlorotoluene		5	5.14	ug/L	103	(70-130)	20	3.8
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.480	ug/L	96	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.81	ug/L	96	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	5.20	ug/L	104	(70-130)	20	7.8
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.600	ug/L	120	(50-150)		
LCS1	o-Xylene		5	4.85	ug/L	97	(70-130)		
LCS2	o-Xylene		5	5.15	ug/L	103	(70-130)	20	6.0
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.470	ug/L	94	(50-150)		
LCS1	p-Chlorotoluene		5	5.22	ug/L	104	(70-130)		
LCS2	p-Chlorotoluene		5	5.34	ug/L	107	(70-130)	20	2.3
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.500	ug/L	100	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	4.96	ug/L	99	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.07	ug/L	101	(70-130)	20	2.2
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.510	ug/L	102	(50-150)		
LCS1	p-Isopropyltoluene		5	5.38	ug/L	108	(70-130)		
LCS2	p-Isopropyltoluene		5	5.45	ug/L	109	(70-130)	20	1.3
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.440	ug/L	88	(50-150)		
LCS1	sec-Butylbenzene		5	5.53	ug/L	111	(70-130)		
LCS2	sec-Butylbenzene		5	5.63	ug/L	113	(70-130)	20	1.8
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	Styrene		5	5.05	ug/L	101	(70-130)		
LCS2	Styrene		5	5.42	ug/L	108	(70-130)	20	7.1
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.420	ug/L	84	(50-150)		
LCS1	tert-amyl Methyl Ether		5	4.26	ug/L	85	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.60	ug/L	92	(70-130)	20	7.7

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.520	ug/L	104	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	4.56	ug/L	91	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	4.74	ug/L	95	(70-130)	20	3.9
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.580	ug/L	116	(50-150)		
LCS1	tert-Butylbenzene		5	5.01	ug/L	100	(70-130)		
LCS2	tert-Butylbenzene		5	5.14	ug/L	103	(70-130)	20	2.6
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.76	ug/L	95	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	5.08	ug/L	102	(70-130)	20	6.5
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.570	ug/L	114	(50-150)		
LCS1	Toluene		5	4.74	ug/L	95	(70-130)		
LCS2	Toluene		5	5.07	ug/L	101	(70-130)	20	6.7
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.540	ug/L	108	(50-150)		
LCS1	Toluene-d8 (S)		5	101	%	101	(70-130)		
LCS2	Toluene-d8 (S)		5	105	%	105	(70-130)		
MBLK	Toluene-d8 (S)			85.6	%	86	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	95.2	%	95	(70-130)		
MRLLW	Toluene-d8 (S)		5	93.0	%	93	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.77	ug/L	95	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	5.00	ug/L	100	(70-130)	20	4.7
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.600	ug/L	120	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.20	ug/L	84	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.57	ug/L	91	(70-130)	20	8.4
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.71	ug/L	94	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.93	ug/L	99	(70-130)	20	4.6
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.560	ug/L	112	(50-150)		
LCS1	Trichlorofluoromethane		5	4.83	ug/L	97	(70-130)		
LCS2	Trichlorofluoromethane		5	4.78	ug/L	96	(70-130)	20	1.0
MBLK	Trichlorofluoromethane			<0.5	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 936465  
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Trichlorofluoromethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	4.68	ug/L	94	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	4.88	ug/L	98	(70-130)	20	4.2
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.610	ug/L	122	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.63	ug/L	93	(70-130)		
LCS2	Vinyl chloride (VC)		5	4.82	ug/L	96	(70-130)	20	4.0
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.550	ug/L	110	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.280	ug/L	112	(50-150)		

**Total Organic Carbon by SM 5310C**

Analytical Batch: 1331117

Analysis Date: 05/28/2021

LCS1	Total Organic Carbon		5	5.03	mg/L	101	(90-110)		
LCS2	Total Organic Carbon		5	5.04	mg/L	101	(90-110)	20	0.20
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.257	mg/L	129	(50-150)		
MS_202105210602	Total Organic Carbon	2.2	4	6.17	mg/L	100	(80-120)		
MS2_202105180540	Total Organic Carbon	0.61	2	2.73	mg/L	106	(80-120)		
MSD_202105210602	Total Organic Carbon	2.2	4	6.08	mg/L	98	(80-120)	20	1.5
MSD2_202105180540	Total Organic Carbon	0.61	2	2.77	mg/L	108	(80-120)	20	1.3

**ICP Metals by EPA 200.7**

Analytical Batch: 1331521

Analysis Date: 06/01/2021

LCS1	Calcium Total ICAP		50	51.3	mg/L	103	(85-115)		
LCS2	Calcium Total ICAP		50	51.2	mg/L	102	(85-115)	20	0.20
MBLK	Calcium Total ICAP			<0.043087	mg/L				
MRL_CHK	Calcium Total ICAP		1	1.04	mg/L	104	(50-150)		
MS_202105200271	Calcium Total ICAP	ND	50	50.1	mg/L	100	(70-130)		
MS2_202105210186	Calcium Total ICAP	ND	50	50.2	mg/L	100	(70-130)		
MSD_202105200271	Calcium Total ICAP	ND	50	50.1	mg/L	100	(70-130)	20	0.095
MSD2_202105210186	Calcium Total ICAP	ND	50	49.5	mg/L	99	(70-130)	20	1.3
LCS1	Iron Total ICAP		5	5.13	mg/L	103	(85-115)		
LCS2	Iron Total ICAP		5	5.13	mg/L	103	(85-115)	20	0.0
MBLK	Iron Total ICAP			<0.004850	mg/L				
MRL_CHK	Iron Total ICAP		0.01	0.0103	mg/L	103	(50-150)		
MS_202105200271	Iron Total ICAP	ND	5	5.01	mg/L	100	(70-130)		
MS2_202105210186	Iron Total ICAP	ND	5	4.99	mg/L	100	(70-130)		
MSD_202105200271	Iron Total ICAP	ND	5	5.01	mg/L	100	(70-130)	20	0.070

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 936465  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD2_202105210186	Iron Total ICAP	ND	5	4.91	mg/L	98	(70-130)	20	1.6
LCS1	Magnesium Total ICAP		20	20.2	mg/L	101	(85-115)		
LCS2	Magnesium Total ICAP		20	20.2	mg/L	101	(85-115)	20	0.0
MBLK	Magnesium Total ICAP			<0.009606	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0960	mg/L	96	(50-150)		
MS_202105200271	Magnesium Total ICAP	ND	20	20.1	mg/L	101	(70-130)		
MS2_202105210186	Magnesium Total ICAP	ND	20	20.1	mg/L	100	(70-130)		
MSD_202105200271	Magnesium Total ICAP	ND	20	20.0	mg/L	100	(70-130)	20	0.56
MSD2_202105210186	Magnesium Total ICAP	ND	20	19.8	mg/L	99	(70-130)	20	1.6
LCS1	Potassium Total ICAP		20	20.1	mg/L	100	(85-115)		
LCS2	Potassium Total ICAP		20	20.1	mg/L	101	(85-115)	20	0.0
MBLK	Potassium Total ICAP			<0.233312	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.610	mg/L	61	(50-150)		
MS_202105200271	Potassium Total ICAP	ND	20	20.1	mg/L	101	(70-130)		
MS2_202105210186	Potassium Total ICAP	ND	20	20.4	mg/L	102	(70-130)		
MSD_202105200271	Potassium Total ICAP	ND	20	20.1	mg/L	101	(70-130)	20	0.10
MSD2_202105210186	Potassium Total ICAP	ND	20	20.2	mg/L	101	(70-130)	20	1.3
LCS1	Sodium Total ICAP		50	50.5	mg/L	101	(85-115)		
LCS2	Sodium Total ICAP		50	50.4	mg/L	101	(85-115)	20	0.20
MBLK	Sodium Total ICAP			<0.4255	mg/L				
MRL_CHK	Sodium Total ICAP		1	1.02	mg/L	102	(50-150)		
MS_202105200271	Sodium Total ICAP	1.0	50	50.2	mg/L	99	(70-130)		
MS2_202105210186	Sodium Total ICAP	2.9	50	51.8	mg/L	98	(70-130)		
MSD_202105200271	Sodium Total ICAP	1.0	50	50.3	mg/L	99	(70-130)	20	0.13
MSD2_202105210186	Sodium Total ICAP	2.9	50	50.9	mg/L	96	(70-130)	20	1.9

Dissolved Organic Carbon by SM 5310C

Analytical Batch: 1332949

Analysis Date: 06/07/2021

LCS1	Dissolved Organic Carbon		5	5.03	mg/L	101	(90-110)		
LCS2	Dissolved Organic Carbon		5	5.04	mg/L	101	(90-110)	20	0.20
MBLK	Dissolved Organic Carbon			<0.10	mg/L				
MRL_CHK	Dissolved Organic Carbon		0.2	0.253	mg/L	126	(50-150)		
MS_202106080234	Dissolved Organic Carbon	3.2	4	7.01	mg/L	94	(80-120)		
MS2_202106080235	Dissolved Organic Carbon	7.0	2	16.6	mg/L	96	(80-120)		
MSD_202106080234	Dissolved Organic Carbon	3.2	4	7.47	mg/L	106	(80-120)	20	6.3
MSD2_202106080235	Dissolved Organic Carbon	7.0	2	16.9	mg/L	99	(80-120)	20	1.9

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 06/09/2021

Quant Report - Page 1 of 1

, Tel Fax



### Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
Comment: \_\_\_\_\_  
Approved by: \_\_\_\_\_

Date of Issue: 06/09/2021

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 06/09/2021

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large), MPN/100 mL (Total Coliform, E. Coli), Presence/Absence (P/A)\* (Total Coliform, E. Coli)

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 06/09/2021

Quant Report - Page 1 of 1

, Tel Fax

## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-59881-1  
Client Project/Site: 936465

For:  
Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:  
5/29/2021 4:40:05 PM

Xuan Dang, Project Manager I  
(714)895-5494  
[Xuan.Dang@eurofinset.com](mailto:Xuan.Dang@eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 936465

Job ID: 570-59881-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 936465

Job ID: 570-59881-1

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**Job ID: 570-59881-1**

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**Laboratory: Eurofins Calscience LLC**

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**Narrative**

**Job Narrative**  
**570-59881-1**

**Comments**

No additional comments.

**Receipt**

The sample was received on 5/21/2021 12:55 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Eurofins Eaton Analytical  
Project/Site: 936465

Job ID: 570-59881-1

**Client Sample ID: 202105200592**

**Lab Sample ID: 570-59881-1**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 936465

Job ID: 570-59881-1

## General Chemistry

Client Sample ID: 202105200592

Date Collected: 05/20/21 10:21

Date Received: 05/21/21 12:55

Lab Sample ID: 570-59881-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.512	mg/L		05/26/21 09:19	05/26/21 09:19	1

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# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 936465

Job ID: 570-59881-1

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 570-153125/1-A**  
**Matrix: Water**  
**Analysis Batch: 153235**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 153125**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.510	mg/L		05/26/21 09:19	05/26/21 09:19	1

**Lab Sample ID: LCS 570-153125/2-A**  
**Matrix: Water**  
**Analysis Batch: 153235**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 153125**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	37.00		mg/L		93	78 - 114

**Lab Sample ID: LCSD 570-153125/3-A**  
**Matrix: Water**  
**Analysis Batch: 153235**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 153125**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	36.10		mg/L		90	78 - 114	2	18

# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 936465

Job ID: 570-59881-1

## General Chemistry

### Prep Batch: 153125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-59881-1	202105200592	Total/NA	Water	1664A	
MB 570-153125/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-153125/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-153125/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

### Analysis Batch: 153235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-59881-1	202105200592	Total/NA	Water	1664A	153125
MB 570-153125/1-A	Method Blank	Total/NA	Water	1664A	153125
LCS 570-153125/2-A	Lab Control Sample	Total/NA	Water	1664A	153125
LCSD 570-153125/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	153125

# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 936465

Job ID: 570-59881-1

**Client Sample ID: 202105200592**

**Lab Sample ID: 570-59881-1**

**Date Collected: 05/20/21 10:21**

**Matrix: Water**

**Date Received: 05/21/21 12:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			996 mL	1000 mL	153125	05/26/21 09:19	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			153235	05/26/21 09:19	USUL	ECL 1

Instrument ID: NOEQUIP

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 936465

Job ID: 570-59881-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0161	11-19-21
California	Los Angeles County Sanitation Districts	10109	09-30-21
California	SCAQMD LAP	17LA0919	11-30-21
California	State	2944	09-30-21
Guam	State	20-003R	10-31-20 *
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-30-22
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-21

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 936465

Job ID: 570-59881-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

**Protocol References:**

1664A = EPA-821-98-002

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 936465

Job ID: 570-59881-1

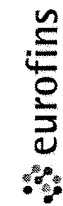
---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-59881-1	202105200592	Water	05/20/21 10:21	05/21/21 12:55	

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- 1
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Eaton Analytical

Ship To:  
Eurofins CalScience  
7440 Lincoln Way  
Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 936465  
Report Due: 06/03/2021

59881

Submittal Form

Date: 5/21/2021

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!  
Report & Invoice must have the Folder # 936465 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report.  
Results must have Complete data & QC with Approval Signature

Reports: Jackie Contreras Sub-Contracting Administrator  
EMAIL TO: Eaton-MonroviaSubContract@eurofins.com  
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
Phone (626) 386-1165 Fax (626) 386-1122  
Invoices to: Eurofins Eaton Analytical, LLC  
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the  
Specified State Certification # and  
Exp Date for requested tests + matrix.  
Samples from: CALIFORNIA

Sample ID 202105200592	Client Sample ID for reference on! LH-INF-20210520	Sample Date & Time 05/20/21 10:21 DW	PWS Systemcode PWSID	JLS
Sample type:	Sample Event:	Facility ID:	Sample Point ID:	Static ID:

Method EPA 1664  
Prep Method  
Analysis Requested  
Oil and Grease by 1664(subbed)



570-59881 Chain of Custody

Relinquished by: Xm Sample Control Date 5/21/21 Time 1255

Received by: Yan TC Date 5/21/21 Time 1255

Relinquished by: \_\_\_\_\_ Sample Control Date \_\_\_\_\_ Time \_\_\_\_\_

Received by: \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

20/2.6 SCS



## Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-59881-1

**Login Number: 59881**

**List Source: Eurofins Calscience LLC**

**List Number: 1**

**Creator: Le, Danny**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)



## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 938766  
Project: 0250000  
Group: WRD Pilot [Set #2]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 938766  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **June 03, 2021 at 1204**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202106030307	GAC-1-20210603	06/03/2021 0833
	Static ID: 537.1	
	@537.1	
202106030308	GAC-2-20210603	06/03/2021 0836
	@537.1	
202106030309	GAC-3-20210603	06/03/2021 0839
	@537.1	
202106030310	GAC-4-20210603	06/03/2021 0842
	@537.1	
202106030311	IX-1-20210603	06/03/2021 0845
	@537.1	
202106030312	IX-2-20210603	06/03/2021 0848
	@537.1	
202106030313	IX-3-20210603	06/03/2021 0851
	@537.1	
202106030314	IX-4-20210603	06/03/2021 0854
	@537.1	
202106030315	LH-INF-20210603	06/03/2021 0857
	@537.1	

#### Test Description

@537.1 -- EPA Method 537.1

438766

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) <u>RDT</u>									
TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com		LABORATORY: Eurofins Eaton Analytical											
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results											
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	DOC
		DATE	TIME										
	GAC-1-20210603	6-3-21	0833	Water	2		2		X				
	GAC-2-20210603		0836	Water					X				
	GAC-3-20210603		0839	Water					X				
	GAC-4-20210603		0842	Water					X				
	IX-1-20210603		0845	Water					X				
	IX-2-20210603		0848	Water					X				
	IX-3-20210603		0851	Water					X				
	IX-4-20210603		0854	Water					X				
	LH-INF-20210603		0857	Water	4	1	3		X				
	<del>IX-5-20210603</del>			Water									
	<del>IX-6-20210603</del>			Water									
	<del>IX-7-20210603</del>			Water									
	<del>IX-8-20210603</del>			Water									
	<del>IX-9-20210603</del>			Water									
	<del>IX-10-20210603</del>			Water									
Relinquished by: (Signature) <u>Robert Torres</u>		Received by: (Signature) <u>Chad Brooker</u>		Date: <u>6-3-2021</u>		Time: <u>1204</u>							
Relinquished by: (Signature)		Received by: (Signature)		Date: <u>6-3-21</u>		Time: <u>1204</u>							
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:							



Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

AEA Folder Number:

438766

IR Gun ID = 6140 (Observation = 9.16 °C) (Corr. Factor = -0.12 °C) (Final = 9.14 °C)

TYPE OF ICE: Real  Synthetic  No Ice  CONDITION OF ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / Fedex / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = Observations _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	2 = (Observations _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)
3 = (Observations _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	4 = (Observations _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

7) VOA and Radon Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251, 552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
	<i>Chun Brooks</i>	Chun Brooks	Eurofins Eaton Analytical	6.3.21	1204



Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 938766  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 938766  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/03/2021 1204

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202106030307      <u>GAC-1-20210603</u></b>						
06/07/2021 13:08	Perfluorobutanesulfonic acid (PFBS)		0.0034		ug/L	0.0020
06/07/2021 13:08	Perfluorohexanoic acid (PFHxA)		0.0027		ug/L	0.0020
<b>202106030308      <u>GAC-2-20210603</u></b>						
06/07/2021 13:27	Perfluorobutanesulfonic acid (PFBS)		0.0073		ug/L	0.0020
06/07/2021 13:27	Perfluorohexanoic acid (PFHxA)		0.0028		ug/L	0.0020
<b>202106030309      <u>GAC-3-20210603</u></b>						
06/07/2021 14:16	Perfluorobutanesulfonic acid (PFBS)		0.0068		ug/L	0.0020
06/07/2021 14:16	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
<b>202106030311      <u>IX-1-20210603</u></b>						
06/07/2021 14:35	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
06/07/2021 14:35	Perfluorooctanoic acid (PFOA)		0.0052		ug/L	0.0020
<b>202106030312      <u>IX-2-20210603</u></b>						
06/07/2021 14:44	Perfluoroheptanoic acid (PFHpA)		0.0020		ug/L	0.0020
06/07/2021 14:44	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
06/07/2021 14:44	Perfluorooctanoic acid (PFOA)		0.0067		ug/L	0.0020
<b>202106030313      <u>IX-3-20210603</u></b>						
06/07/2021 14:54	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
06/07/2021 14:54	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
06/07/2021 14:54	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
<b>202106030314      <u>IX-4-20210603</u></b>						
06/07/2021 15:15	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
06/07/2021 15:15	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
06/07/2021 15:15	Perfluorooctanoic acid (PFOA)		0.0068		ug/L	0.0020
<b>202106030315      <u>LH-INF-20210603</u></b>						
06/07/2021 15:26	Perfluorobutanesulfonic acid (PFBS)		0.0066		ug/L	0.0020
06/07/2021 15:26	Perfluorohexanesulfonic acid (PFHxS)		0.0058		ug/L	0.0020
06/07/2021 15:26	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
06/07/2021 15:26	Perfluorononanoic acid (PFNA)		0.0027		ug/L	0.0020
06/07/2021 15:26	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
06/07/2021 15:26	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 938766  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/03/2021 1204

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20210603 (202106030307)</b>					<b>Sampled on 06/03/2021 0833</b>				
Static ID: 537.1									
<b>EPA 537.1 - EPA Method 537.1</b>									
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0034	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0027	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	0.0020	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	13C2-PFDA	103	%	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	13C2-PFHxA	104	%	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	13C2-PFOA- IS#1	120	%	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	13C3-HFPO-DA	102	%	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	13C4-PFOS- IS#2	105	%	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	d3-NMeFOSAA	105	%	1
06/04/21	06/07/21	13:08	1332434	1332871	(EPA 537.1)	d5-NEtFOSAA	118	%	1

<b>GAC-2-20210603 (202106030308)</b>					<b>Sampled on 06/03/2021 0836</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
06/04/21	06/07/21	13:27	1332434	1332871	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0020	1
06/04/21	06/07/21	13:27	1332434	1332871	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 938766  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/03/2021 1204

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0073	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0028	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	13C2-PFDA	100	%		1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	13C2-PFHxA	108	%		1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	13C3-HFPO-DA	103	%		1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	d3-NMeFOSAA	105	%		1
06/04/21	06/07/21 13:27	1332434	1332871	(EPA 537.1)	d5-NEtFOSAA	121	%		1

**GAC-3-20210603 (202106030309)**

Sampled on 06/03/2021 0839

**EPA 537.1 - EPA Method 537.1**

06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 938766  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/03/2021 1204

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0068	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	13C2-PFDA	101	%		1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	13C2-PFHxA	107	%		1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	13C3-HFPO-DA	102	%		1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	d3-NMeFOSAA	104	%		1
06/04/21	06/07/21 14:16	1332434	1332871	(EPA 537.1)	d5-NEtFOSAA	126	%		1

**GAC-4-20210603 (202106030310)**

**Sampled on 06/03/2021 0842**

**EPA 537.1 - EPA Method 537.1**

06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 938766  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/03/2021 1204

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	13C2-PFDA	105	%		1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	13C2-PFHxA	112	%		1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	13C3-HFPO-DA	107	%		1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	d3-NMeFOSAA	103	%		1
06/04/21	06/07/21 14:25	1332434	1332871	(EPA 537.1)	d5-NEtFOSAA	121	%		1

**IX-1-20210603 (202106030311)**

**Sampled on 06/03/2021 0845**

**EPA 537.1 - EPA Method 537.1**

06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0052	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 938766  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/03/2021 1204

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	13C2-PFDA	111	%		1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	13C2-PFHxA	114	%		1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	13C2-PFOA- IS#1	114	%		1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	13C3-HFPO-DA	113	%		1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	d3-NMeFOSAA	105	%		1
06/04/21	06/07/21 14:35	1332434	1332871	(EPA 537.1)	d5-NEtFOSAA	123	%		1

**IX-2-20210603 (202106030312)**

**Sampled on 06/03/2021 0848**

**EPA 537.1 - EPA Method 537.1**

06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0020	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0067	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	13C2-PFDA	104	%		1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	13C2-PFHxA	112	%		1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	13C3-HFPO-DA	110	%		1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	d3-NMeFOSAA	101	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

Report: 938766  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/03/2021 1204

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/04/21	06/07/21 14:44	1332434	1332871	(EPA 537.1)	d5-NEtFOSAA	121	%		1
<b>IX-3-20210603 (202106030313)</b>					<b>Sampled on 06/03/2021 0851</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	13C2-PFDA	111	%		1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	13C2-PFHxA	121	%		1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	13C3-HFPO-DA	118	%		1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	d3-NMeFOSAA	99	%		1
06/04/21	06/07/21 14:54	1332434	1332871	(EPA 537.1)	d5-NEtFOSAA	124	%		1

<b>IX-4-20210603 (202106030314)</b>					<b>Sampled on 06/03/2021 0854</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



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 1 800 566 LABS (1 800 566 5227)

Report: 938766  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/03/2021 1204

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0068	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	13C2-PFDA	109	%		1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	13C2-PFHxA	117	%		1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	13C3-HFPO-DA	113	%		1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	d3-NMeFOSAA	94	%		1
06/04/21	06/07/21 15:15	1332434	1332871	(EPA 537.1)	d5-NETFOSAA	117	%		1

**LH-INF-20210603 (202106030315)**

**Sampled on 06/03/2021 0857**

**EPA 537.1 - EPA Method 537.1**

06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 938766  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/03/2021 1204

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0066	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0058	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0027	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	13C2-PFDA	111	%		1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	13C2-PFHxA	118	%		1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	13C3-HFPO-DA	113	%		1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	d3-NMeFOSAA	99	%		1
06/04/21	06/07/21 15:26	1332434	1332871	(EPA 537.1)	d5-NEtFOSAA	126	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Water Replenishment District

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**EPA Method 537.1****Prep Batch: 1332434 Analytical Batch: 1332871**

202106030307	GAC-1-20210603
202106030308	GAC-2-20210603
202106030309	GAC-3-20210603
202106030310	GAC-4-20210603
202106030311	IX-1-20210603
202106030312	IX-2-20210603
202106030313	IX-3-20210603
202106030314	IX-4-20210603
202106030315	LH-INF-20210603

**Analysis Date: 06/07/2021**

Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
Analyzed by: KAM  
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Report: 938766  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>EPA Method 537.1 by EPA 537.1</b>									
<b>Prep Batch: 1332434 Analytical Batch: 1332871</b>					<b>Analysis Date: 06/07/2021</b>				
DUP_202106030308	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0247	ug/L	105	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0247	ug/L	105	(70-130)	30	0.0
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00195	ug/L	104	(50-150)		
MS_202106030307	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00198	ug/L	106	(50-150)		
DUP_202106030308	13C2-PFDA (S)			105	%	105	(70-130)		
LCS1	13C2-PFDA (S)		100	110	%	110	(70-130)		
LCS2	13C2-PFDA (S)		100	115	%	115	(70-130)		
MBLK	13C2-PFDA (S)			115	%	115	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	113	%	113	(70-130)		
MS_202106030307	13C2-PFDA (S)		100	101	%	101	(70-130)		
DUP_202106030308	13C2-PFHxA (S)			109	%	109	(70-130)		
LCS1	13C2-PFHxA (S)		100	115	%	115	(70-130)		
LCS2	13C2-PFHxA (S)		100	116	%	116	(70-130)		
MBLK	13C2-PFHxA (S)			120	%	120	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	117	%	117	(70-130)		
MS_202106030307	13C2-PFHxA (S)		100	106	%	106	(70-130)		
DUP_202106030308	13C2-PFOA- IS#1 (I)			119	%	119	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			109	%	109	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	108	%	109	(50-150)		
MS_202106030307	13C2-PFOA- IS#1 (I)		100	123	%	123	(50-150)		
DUP_202106030308	13C3-HFPO-DA (S)			105	%	105	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	113	%	113	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	115	%	115	(70-130)		
MBLK	13C3-HFPO-DA (S)			116	%	117	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	112	%	112	(70-130)		
MS_202106030307	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
DUP_202106030308	13C4-PFOS- IS#2 (I)			104	%	104	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 938766  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202106030307	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
DUP_202106030308	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0254	ug/L	108	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0248	ug/L	105	(70-130)	30	2.4
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00217	ug/L	115	(50-150)		
MS_202106030307	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00188	ug/L	98	(50-150)		
DUP_202106030308	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0248	ug/L	107	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0249	ug/L	107	(70-130)	30	0.40
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00209	ug/L	112	(50-150)		
MS_202106030307	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00205	ug/L	110	(50-150)		
DUP_202106030308	d3-NMeFOSAA (I)			103	%	103	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MBLK	d3-NMeFOSAA (I)			106	%	106	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
MS_202106030307	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
DUP_202106030308	d5-NEtFOSAA (S)			119	%	119	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	116	%	117	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	116	%	116	(70-130)		
MBLK	d5-NEtFOSAA (S)			110	%	110	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	115	%	115	(70-130)		
MS_202106030307	d5-NEtFOSAA (S)		100	122	%	122	(70-130)		
DUP_202106030308	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0258	ug/L	103	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0254	ug/L	101	(70-130)	30	1.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202106030307	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00189	ug/L	95	(50-150)		
DUP_202106030308	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0269	ug/L	108	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0272	ug/L	109	(70-130)	30	1.1
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS_202106030307	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00222	ug/L	111	(50-150)		
DUP_202106030308	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 938766  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0268	ug/L	107	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0266	ug/L	106	(70-130)	30	0.75
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00225	ug/L	112	(50-150)		
MS_202106030307	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00210	ug/L	100	(50-150)		
DUP_202106030308	Perfluorobutanesulfonic acid (PFBS)	0.0073		0.00708	ug/L		(0-30)	30	3.5
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0243	ug/L	110	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0244	ug/L	110	(70-130)	30	0.41
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00193	ug/L	109	(50-150)		
MS_202106030307	Perfluorobutanesulfonic acid (PFBS)	0.0034	0.0018	0.00529	ug/L	109	(50-150)		
DUP_202106030308	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0263	ug/L	105	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0257	ug/L	103	(70-130)	30	2.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202106030307	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00194	ug/L	94	(50-150)		
DUP_202106030308	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0255	ug/L	102	(70-130)	30	2.0
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00222	ug/L	111	(50-150)		
MS_202106030307	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00182	ug/L	91	(50-150)		
DUP_202106030308	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0269	ug/L	108	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0265	ug/L	106	(70-130)	30	1.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00230	ug/L	115	(50-150)		
MS_202106030307	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00254	ug/L	98	(50-150)		
DUP_202106030308	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0254	ug/L	112	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0253	ug/L	111	(70-130)	30	0.79
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00214	ug/L	117	(50-150)		
MS_202106030307	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00264	ug/L	118	(50-150)		
DUP_202106030308	Perfluorohexanoic acid (PFHxA)	0.0028		0.00276	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0279	ug/L	112	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0262	ug/L	105	(70-130)	30	6.3

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 938766  
 Project: 0250000  
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202106030307	Perfluorohexanoic acid (PFHxA)	0.0027	0.002	0.00448	ug/L	88	(50-150)		
DUP_202106030308	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0271	ug/L	109	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0265	ug/L	106	(70-130)	30	2.2
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00241	ug/L	121	(50-150)		
MS_202106030307	Perfluorononanoic acid (PFNA)	ND	0.002	0.00210	ug/L	95	(50-150)		
DUP_202106030308	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0257	ug/L	111	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0255	ug/L	110	(70-130)	30	0.78
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00217	ug/L	117	(50-150)		
MS_202106030307	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00282	ug/L	117	(50-150)		
DUP_202106030308	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0279	ug/L	112	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0276	ug/L	110	(70-130)	30	1.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00235	ug/L	117	(50-150)		
MS_202106030307	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00399	ug/L	107	(50-150)		
DUP_202106030308	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0253	ug/L	101	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0253	ug/L	101	(70-130)	30	0.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202106030307	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00173	ug/L	82	(50-150)		
DUP_202106030308	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0246	ug/L	99	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0243	ug/L	97	(70-130)	30	1.2
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00202	ug/L	101	(50-150)		
MS_202106030307	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00174	ug/L	87	(50-150)		
DUP_202106030308	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0256	ug/L	102	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0249	ug/L	100	(70-130)	30	2.8
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00206	ug/L	103	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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**Report:** 938766  
**Project:** 0250000  
**Group:** WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202106030307	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00187	ug/L	94	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 06/09/2021

Quant Report - Page 1 of 1

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Pos Tubes (Tot, E., Coli), MPN/100ml (Tot, E., Coli), Pres/Abs (P/A)\* (Tot, E., Coli)

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required:
Comment:
Approved by:

Date of Issue: 06/09/2021

Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 06/09/2021

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence of Total Coliform and E.Coli

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)\*

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 06/09/2021

Quant Report - Page 1 of 1

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750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
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1 800 566 LABS (1 800 566 5227)



## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 938769  
Project: 0250000  
Group: WRD Pilot (DOC/TOC)

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>2-</sup> D		x	
Sulfite	SM 4500-SO <sup>3-</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			



### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 938769  
 Project: 0250000  
 Sample Group: WRD Pilot (DOC/TOC)

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **June 03, 2021 at 1204**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202106030317	LH-INF-20210603	06/03/2021 0857
	Dissolved Organic Carbon	Total Organic Carbon

### Test Description

638 769

<p><b>FROM:</b> GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070</p> <p><b>TEL:</b> (949) 679-1070    <b>E-MAIL:</b> mjeon@gsi-net.com</p> <p><b>LABORATORY:</b> Eurofins Eaton Analytical</p> <p><b>TURNAROUND TIME:</b>  <input type="checkbox"/> SAME DAY    <input type="checkbox"/> 24 HR    <input type="checkbox"/> 48 HR  <input type="checkbox"/> 72 HR    <input type="checkbox"/> 5 DAYS    <input checked="" type="checkbox"/> STANDARD</p> <p><b>SPECIAL INSTRUCTIONS:</b> Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, &amp; rdtorres@gsi-net.com; Provide EDD of sample results</p>	<p><b>PROJECT NAME:</b> WRD Pilot</p> <p><b>PROJECT CONTACT:</b> Miae Jeon</p> <p><b>GLOBAL ID:</b></p> <p><b>PROJECT NO.:</b> 5302</p> <p><b>LAB CONTACT:</b> Sophia Liang</p> <p><b>SAMPLER(S): (PRINT)</b> RDT</p>	<p><b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">LAB USE ONLY</th> <th rowspan="2">SAMPLE ID</th> <th colspan="2">SAMPLING</th> <th rowspan="2">MATRIX</th> <th rowspan="2">NO. OF CONT.</th> <th colspan="3">Preservation</th> <th rowspan="2">PFAS - full list (EPA 537.1)</th> <th rowspan="2">Sulfate, Nitrate (as N), Nitrite (as NO3), Chloride (EPA 300.0)</th> <th rowspan="2">Alkalinity (as CaCO3), (SM 2320B)</th> <th rowspan="2">TOC (SM 5310C)</th> <th rowspan="2">DOC</th> </tr> <tr> <th>DATE</th> <th>TIME</th> <th>Unpreserved</th> <th>Preserved</th> <th>Field Filtered</th> </tr> </thead> <tbody> <tr> <td></td> <td>GAC-1-20210603</td> <td>6-3-21</td> <td>0833</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-2-20210603</td> <td></td> <td>0836</td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-3-20210603</td> <td></td> <td>0839</td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-4-20210603</td> <td></td> <td>0842</td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-1-20210603</td> <td></td> <td>0845</td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-2-20210603</td> <td></td> <td>0848</td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-3-20210603</td> <td></td> <td>0851</td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-4-20210603</td> <td></td> <td>0854</td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>LH-INF-20210603</td> <td></td> <td>0857</td> <td>Water</td> <td>4</td> <td>1</td> <td>3</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Preservation			PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrite (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	DOC	DATE	TIME	Unpreserved	Preserved	Field Filtered		GAC-1-20210603	6-3-21	0833	Water	2		2		X						GAC-2-20210603		0836	Water					X						GAC-3-20210603		0839	Water					X						GAC-4-20210603		0842	Water					X						IX-1-20210603		0845	Water					X						IX-2-20210603		0848	Water					X						IX-3-20210603		0851	Water					X						IX-4-20210603		0854	Water					X						LH-INF-20210603		0857	Water	4	1	3		X									Water														Water														Water														Water														Water														Water									
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<p>Date: 6-3-2021</p> <p>Date: 6-3-21</p> <p>Date:</p>		<p>Time: 1204</p> <p>Time: 1204</p> <p>Time:</p>																																																																																																																																																																																																																																					



Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 428769

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 6110 (Observation = 9.16 °C) (Corr. Factor = 0.12 °C) (Final = 9.14 °C)

TYPE OF ICE: Real  Synthetic  No ice  CONDITION OF ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

7) VOA and Radon Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

Exempt from headspace concerns: Methods 615.4, HAA(6251, 552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: <u>Chun Brooks</u>	SIGNATURE	PRINT NAME: <u>Chun Brooks</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>6-3-21</u>	TIME: <u>1204</u>
---------------------------------	-----------	--------------------------------	---	---------------------	-------------------

Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 938769  
**Project:** 0250000  
**Group:** WRD Pilot (DOC/TOC)

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

---

**Flags Legend:**

B4 - Target analyte detected in blank at or above method acceptance criteria.

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Fax: (626) 988-3757  
1 800 566 LABS (1 800 566 5227)

Report: 938769  
Project: 0250000  
Group: WRD Pilot (DOC/TOC)

**Water Replenishment District**  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

Samples Received on:  
06/03/2021 1204

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	<b>202106030317</b>	<b><u>LH-INF-20210603</u></b>				
06/10/2021 01:31	Dissolved Organic Carbon		0.84		mg/L	0.40
06/08/2021 21:19	Total Organic Carbon		1.0		mg/L	0.20

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**Report:** 938769  
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**Group:** WRD Pilot (DOC/TOC)

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/03/2021 1204

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>LH-INF-20210603 (202106030317)</b>						<b>Sampled on 06/03/2021 0857</b>			
<b>SM 5310C - Total Organic Carbon</b>									
	06/08/21 21:19		1333201	(SM 5310C)	Total Organic Carbon	1.0	mg/L	0.20	1
<b>SM 5310C - Dissolved Organic Carbon</b>									
06/03/21	06/10/21 01:31	1332072	1328392	(SM 5310C)	Dissolved Organic Carbon	0.84 (B4)	mg/L	0.40	2

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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1 800 566 LABS (1 800 566 5227)

**Report:** 938769  
**Project:** 0250000  
**Group:** WRD Pilot (DOC/TOC)

Water Replenishment District

---

**Dissolved Organic Carbon**

**Prep Batch: 1332072 Analytical Batch: 1328392**

202106030317                      LH-INF-20210603

**Analysis Date: 06/10/2021**

Analyzed by: TLL7

**Total Organic Carbon**

**Analytical Batch: 1333201**

202106030317                      LH-INF-20210603

**Analysis Date: 06/08/2021**

Analyzed by: TLL7

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 938769  
 Project: 0250000  
 Group: WRD Pilot (DOC/TOC)

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Dissolved Organic Carbon by SM 5310C</b>									
<b>Analytical Batch: 1328392</b>					<b>Analysis Date: 06/10/2021</b>				
LCS1	Dissolved Organic Carbon		5	5.10	mg/L	102	(90-110)		
LCS2	Dissolved Organic Carbon		5	5.01	mg/L	100	(90-110)	20	1.8
MBLK	Dissolved Organic Carbon			<0.10	mg/L				
MRL_CHK	Dissolved Organic Carbon		0.2	0.258	mg/L	129	(50-150)		
MS_202106100220	Dissolved Organic Carbon	0.75	4	4.71	mg/L	99	(80-120)		
MS2_202106100221	Dissolved Organic Carbon	0.58	2	2.54	mg/L	98	(80-120)		
MSD_202106100220	Dissolved Organic Carbon	0.75	4	4.69	mg/L	99	(80-120)	20	0.40
MSD2_202106100221	Dissolved Organic Carbon	0.58	2	2.45	mg/L	93	(80-120)	20	3.5
<b>Total Organic Carbon by SM 5310C</b>									
<b>Analytical Batch: 1333201</b>					<b>Analysis Date: 06/08/2021</b>				
LCS1	Total Organic Carbon		5	5.00	mg/L	100	(90-110)		
LCS2	Total Organic Carbon		5	4.86	mg/L	97	(90-110)	20	2.8
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.257	mg/L	129	(50-150)		
MS_202105140490	Total Organic Carbon	0.59	4	4.40	mg/L	95	(80-120)		
MS2_202105120942	Total Organic Carbon	0.47	2	2.31	mg/L	92	(80-120)		
MSD_202105140490	Total Organic Carbon	0.59	4	4.72	mg/L	103	(80-120)	20	7.0
MSD2_202105120942	Total Organic Carbon	0.47	2	2.34	mg/L	94	(80-120)	20	1.2

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.



**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 06/14/2021

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 06/14/2021

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 06/14/2021

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_  
Project: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Sampled By: \_\_\_\_\_  
Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Total Coliform Large, E. Coli Small, E. Coli Large), MPN/100 mL (Total Coliform, E. Coli), and Presence/Absence (P/A)\* (Total Coliform, E. Coli).

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 06/14/2021

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Water Replenishment District  
4040 Paramount Blvd.  
Lakewood, CA 90712  
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang  
Project Manager

Report: 941985  
Project: 0250000  
Group: WRD Pilot [Set #1]

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

### STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S <sup>-2</sup> D		x	
Sulfite	SM 4500-SO <sup>3</sup> B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			



### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Client ID: WRD  
 Folder #: 941985  
 Project: 0250000  
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
 Phone: 562-275-4226

Project Manager: Sophia F Liang  
 Phone:

The following samples were received from you on **June 21, 2021 at 1311**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202106210622</u>	GAC-1-20210621	06/21/2021 0925
	@537.1	
<u>202106210623</u>	GAC-2-20210621	06/21/2021 0928
	@537.1	
<u>202106210624</u>	GAC-3-20210621	06/21/2021 0931
	@537.1	
<u>202106210625</u>	GAC-4-20210621	06/21/2021 0934
	@537.1	
<u>202106210626</u>	IX-1-20210621	06/21/2021 0937
	@537.1	
<u>202106210627</u>	IX-2-20210621	06/21/2021 0940
	@537.1	
<u>202106210628</u>	IX-3-20210621	06/21/2021 0943
	@537.1	
<u>202106210629</u>	IX-4-20210621	06/21/2021 0946
	@537.1	
<u>202106210630</u>	GAC-1M-20210621	06/21/2021 0949
	@537.1	
<u>202106210631</u>	GAC-2M-20210621	06/21/2021 0952
	@537.1	
<u>202106210632</u>	GAC-3M-20210621	06/21/2021 0955
	@537.1	
<u>202106210633</u>	GAC-4M-20210621	06/21/2021 0958
	@537.1	
<u>202106210634</u>	IX-1M-20210621	06/21/2021 1001
	@537.1	

### Acknowledgement of Samples Received

Addr: **Water Replenishment District**  
4040 Paramount Blvd.  
Lakewood, CA 90712

Client ID: WRD  
Folder #: 941985  
Project: 0250000  
Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles  
Phone: 562-275-4226

Project Manager: Sophia F Liang  
Phone:

The following samples were received from you on **June 21, 2021** at **1311**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202106210635	IX-2M-20210621	06/21/2021 1004
	@537.1	
202106210636	IX-3M-20210621	06/21/2021 1007
	@537.1	
202106210637	IX-4M-20210621	06/21/2021 1010
	@537.1	
202106210638	LH-INF-20210621	06/21/2021 1013
	@537.1	
	@ANIONS48	@VOASDWAEDD_SB
	Alkalinity in CaCO3 units	Calcium Total ICAP
	Chloride	Hexavalent chromium(Dissolved)
	Iron Total ICAP	Magnesium Total ICAP
	Manganese Total ICAP/MS	Potassium Total ICAP
	Sodium Total ICAP	Total Dissolved Solid (TDS)
	Total Hardness as CaCO3 by ICP	Total Suspended Solids (TSS)
	Uranium by ICPMS as pCi/L	

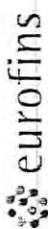
### Test Description

@537.1 -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

@VOASDWAEDD\_SB -- VOC EPA 524.2 Monrovia List





Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 941985

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 616 (Observation = 21.3 °C) (Corr.Factor = 0.2 °C) (Final = 21.1 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Condition of Ice: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants.

1 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results \_\_\_\_\_

7) VOA and Radon Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

### Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm
0638	7						
0635	1						

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

RECEIVED BY: <u>Chris Broderick</u>	PRINT NAME: <u>Chris Broderick</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>6-21-24</u>	TIME: <u>1311</u>
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Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

**Report:** 941985  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District  
Joseph Liles  
4040 Paramount Blvd.  
Lakewood, CA 90712

**Folder Comments**

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Analytical results for EPA 524.2 compounds are submitted by Eurofins Calscience Irvine, CA  
CA ELAP cert 2706 exp 6-30-2022

**Flags Legend:**

M1 - Matrix spike recovery was high; the associated blank spike recovery was acceptable.  
RA - MS/MSD RPD exceeded the method acceptance limit. Recovery did not meet acceptance criteria.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>202106210622      <u>GAC-1-20210621</u></b>						
06/24/2021 08:56	Perfluorobutanesulfonic acid (PFBS)		0.0041		ug/L	0.0020
06/24/2021 08:56	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
06/24/2021 08:56	Perfluorooctanoic acid (PFOA)		0.0022		ug/L	0.0020
<b>202106210623      <u>GAC-2-20210621</u></b>						
06/24/2021 09:17	Perfluorobutanesulfonic acid (PFBS)		0.0092		ug/L	0.0020
06/24/2021 09:17	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
<b>202106210624      <u>GAC-3-20210621</u></b>						
06/24/2021 09:28	Perfluorobutanesulfonic acid (PFBS)		0.0075		ug/L	0.0020
06/24/2021 09:28	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
<b>202106210626      <u>IX-1-20210621</u></b>						
06/24/2021 09:47	Perfluorohexanoic acid (PFHxA)		0.0048		ug/L	0.0020
06/24/2021 09:47	Perfluorooctanoic acid (PFOA)		0.0050		ug/L	0.0020
<b>202106210627      <u>IX-2-20210621</u></b>						
06/24/2021 09:57	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
06/24/2021 09:57	Perfluorooctanoic acid (PFOA)		0.0070		ug/L	0.0020
<b>202106210628      <u>IX-3-20210621</u></b>						
06/24/2021 10:06	Perfluoroheptanoic acid (PFHpA)		0.0020		ug/L	0.0020
06/24/2021 10:06	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
06/24/2021 10:06	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
<b>202106210629      <u>IX-4-20210621</u></b>						
06/24/2021 10:16	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
06/24/2021 10:16	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
06/24/2021 10:16	Perfluorooctanoic acid (PFOA)		0.0079		ug/L	0.0020
<b>202106210630      <u>GAC-1M-20210621</u></b>						
06/24/2021 10:25	Perfluorobutanesulfonic acid (PFBS)		0.0078		ug/L	0.0020
06/24/2021 10:25	Perfluorohexanesulfonic acid (PFHxS)		0.0045		ug/L	0.0020
06/24/2021 10:25	Perfluorohexanoic acid (PFHxA)		0.0046		ug/L	0.0020
06/24/2021 10:25	Perfluorooctanesulfonic acid (PFOS)		0.011		ug/L	0.0020
06/24/2021 10:25	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
<b>202106210631      <u>GAC-2M-20210621</u></b>						
06/24/2021 10:36	Perfluorobutanesulfonic acid (PFBS)		0.0070		ug/L	0.0020
06/24/2021 10:36	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
06/24/2021 10:36	Perfluorohexanesulfonic acid (PFHxS)		0.0053		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
06/24/2021 10:36	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
06/24/2021 10:36	Perfluorooctanesulfonic acid (PFOS)		0.0037		ug/L	0.0020
06/24/2021 10:36	Perfluorooctanoic acid (PFOA)		0.010		ug/L	0.0020
		<b>202106210632      <u>GAC-3M-20210621</u></b>				
06/24/2021 10:46	Perfluorobutanesulfonic acid (PFBS)		0.0068		ug/L	0.0020
06/24/2021 10:46	Perfluorohexanesulfonic acid (PFHxS)		0.0054		ug/L	0.0020
06/24/2021 10:46	Perfluorohexanoic acid (PFHxA)		0.0039		ug/L	0.0020
06/24/2021 10:46	Perfluorononanoic acid (PFNA)		0.0020		ug/L	0.0020
06/24/2021 10:46	Perfluorooctanesulfonic acid (PFOS)		0.014		ug/L	0.0020
06/24/2021 10:46	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
		<b>202106210633      <u>GAC-4M-20210621</u></b>				
06/24/2021 15:54	Perfluorobutanesulfonic acid (PFBS)		0.0041		ug/L	0.0020
06/24/2021 15:54	Perfluorohexanoic acid (PFHxA)		0.0026		ug/L	0.0020
06/24/2021 15:54	Perfluorooctanesulfonic acid (PFOS)		0.0046		ug/L	0.0020
06/24/2021 15:54	Perfluorooctanoic acid (PFOA)		0.0045		ug/L	0.0020
		<b>202106210634      <u>IX-1M-20210621</u></b>				
06/24/2021 16:03	Perfluorobutanesulfonic acid (PFBS)		0.0031		ug/L	0.0020
06/24/2021 16:03	Perfluorohexanoic acid (PFHxA)		0.0035		ug/L	0.0020
06/24/2021 16:03	Perfluorononanoic acid (PFNA)		0.0020		ug/L	0.0020
06/24/2021 16:03	Perfluorooctanesulfonic acid (PFOS)		0.0071		ug/L	0.0020
06/24/2021 16:03	Perfluorooctanoic acid (PFOA)		0.0093		ug/L	0.0020
		<b>202106210635      <u>IX-2M-20210621</u></b>				
06/24/2021 16:13	Perfluorobutanesulfonic acid (PFBS)		0.0032		ug/L	0.0020
06/24/2021 16:13	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
06/24/2021 16:13	Perfluorononanoic acid (PFNA)		0.0020		ug/L	0.0020
06/24/2021 16:13	Perfluorooctanesulfonic acid (PFOS)		0.0035		ug/L	0.0020
06/24/2021 16:13	Perfluorooctanoic acid (PFOA)		0.0099		ug/L	0.0020
		<b>202106210636      <u>IX-3M-20210621</u></b>				
06/24/2021 16:23	Perfluorobutanesulfonic acid (PFBS)		0.0039		ug/L	0.0020
06/24/2021 16:23	Perfluorohexanoic acid (PFHxA)		0.0035		ug/L	0.0020
06/24/2021 16:23	Perfluorononanoic acid (PFNA)		0.0020		ug/L	0.0020
06/24/2021 16:23	Perfluorooctanesulfonic acid (PFOS)		0.0046		ug/L	0.0020
06/24/2021 16:23	Perfluorooctanoic acid (PFOA)		0.0086		ug/L	0.0020
		<b>202106210637      <u>IX-4M-20210621</u></b>				
06/24/2021 16:32	Perfluorobutanesulfonic acid (PFBS)		0.0056		ug/L	0.0020

**SUMMARY OF POSITIVE DATA ONLY**

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
06/24/2021 16:32	Perfluorohexanesulfonic acid (PFHxS)		0.0025		ug/L	0.0020
06/24/2021 16:32	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
06/24/2021 16:32	Perfluorononanoic acid (PFNA)		0.0027		ug/L	0.0020
06/24/2021 16:32	Perfluorooctanesulfonic acid (PFOS)		0.0074		ug/L	0.0020
06/24/2021 16:32	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		<b>202106210638</b>				
		<b><u>LH-INF-20210621</u></b>				
06/23/2021 16:39	Alkalinity in CaCO3 units		190		mg/L	2.0
07/01/2021 21:44	Arsenic Total ICAP/MS		3.2	10	ug/L	1.0
06/23/2021 14:32	Calcium Total ICAP		110		mg/L	1.0
06/21/2021 17:26	Chloride		100	250	mg/L	5.0
07/01/2021 15:01	Chloroform		0.78		ug/L	0.5
06/29/2021 05:46	Dissolved Organic Carbon		0.90		mg/L	0.20
06/25/2021 14:33	Hexavalent chromium(Dissolved)		0.76		ug/L	0.020
06/23/2021 14:32	Magnesium Total ICAP		21		mg/L	0.10
06/21/2021 17:26	Nitrate as Nitrogen by IC		3.0	10	mg/L	1.0
06/21/2021 17:26	Nitrate as NO3 (calc)		13	45	mg/L	4.4
06/24/2021 16:42	Perfluorobutanesulfonic acid (PFBS)		0.0066		ug/L	0.0020
06/24/2021 16:42	Perfluorohexanesulfonic acid (PFHxS)		0.0060		ug/L	0.0020
06/24/2021 16:42	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
06/24/2021 16:42	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
06/24/2021 16:42	Perfluorooctanesulfonic acid (PFOS)		0.029		ug/L	0.0020
06/24/2021 16:42	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
06/23/2021 14:32	Potassium Total ICAP		4.6		mg/L	1.0
06/23/2021 14:32	Sodium Total ICAP		69		mg/L	1.0
06/21/2021 17:26	Sulfate		160	250	mg/L	5.0
06/25/2021 21:35	Total Dissolved Solids (TDS)		640	500	mg/L	10
06/23/2021 16:37	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
06/21/2021 17:26	Total Nitrate, Nitrite-N, CALC		3.0		mg/L	0.10
06/29/2021 17:20	Total Organic Carbon		1.1		mg/L	0.20
07/01/2021 15:01	Total THMs		0.78		ug/L	0.5
07/01/2021 22:44	Uranium by ICPMS as pCi/L		3.6		pCi/L	0.70
07/01/2021 21:44	Uranium ICAP/MS		5.4	30	ug/L	1.0

**SUMMARY OF POSITIVE DATA ONLY**



Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>GAC-1-20210621 (202106210622)</b>					<b>Sampled on 06/21/2021 0925</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0041	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0022	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	13C2-PFDA	102	%		1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	13C2-PFHxA	103	%		1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	13C3-HFPO-DA	101	%		1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	d3-NMeFOSAA	119	%		1
06/22/21	06/24/21 08:56	1336267	1337129	(EPA 537.1)	d5-NEtFOSAA	100	%		1

<b>GAC-2-20210621 (202106210623)</b>					<b>Sampled on 06/21/2021 0928</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0092	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	13C2-PFDA	107	%		1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	13C2-PFHxA	110	%		1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	13C3-HFPO-DA	104	%		1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	d3-NMeFOSAA	109	%		1
06/22/21	06/24/21 09:17	1336267	1337129	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**GAC-3-20210621 (202106210624)**

Sampled on 06/21/2021 0931

**EPA 537.1 - EPA Method 537.1**

06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0075	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	13C2-PFDA	95	%		1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	13C2-PFHxA	108	%		1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	13C3-HFPO-DA	96	%		1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	d3-NMeFOSAA	119	%		1
06/22/21	06/24/21 09:28	1336267	1337129	(EPA 537.1)	d5-NEtFOSAA	103	%		1

**GAC-4-20210621 (202106210625)**

Sampled on 06/21/2021 0934

**EPA 537.1 - EPA Method 537.1**

06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	13C2-PFDA	101	%		1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	13C2-PFHxA	104	%		1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	13C3-HFPO-DA	97	%		1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	d3-NMeFOSAA	121	%		1
06/22/21	06/24/21 09:37	1336267	1337129	(EPA 537.1)	d5-NEtFOSAA	102	%		1

**IX-1-20210621 (202106210626)**

Sampled on 06/21/2021 0937

**EPA 537.1 - EPA Method 537.1**

06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0048	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0050	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	13C2-PFDA	100	%		1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	13C2-PFHxA	108	%		1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	13C3-HFPO-DA	102	%		1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	d3-NMeFOSAA	119	%		1
06/22/21	06/24/21 09:47	1336267	1337129	(EPA 537.1)	d5-NEtFOSAA	97	%		1

**IX-2-20210621 (202106210627)**

**Sampled on 06/21/2021 0940**

**EPA 537.1 - EPA Method 537.1**

06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0070	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	13C2-PFDA	106	%		1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	13C2-PFHxA	111	%		1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	13C3-HFPO-DA	108	%		1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	d3-NMeFOSAA	117	%		1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/22/21	06/24/21 09:57	1336267	1337129	(EPA 537.1)	d5-NEtFOSAA	109	%		1
<b>IX-3-20210621 (202106210628)</b>					<b>Sampled on 06/21/2021 0943</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0020	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	13C2-PFDA	105	%		1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	13C2-PFHxA	109	%		1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	13C3-HFPO-DA	104	%		1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	d3-NMeFOSAA	117	%		1
06/22/21	06/24/21 10:06	1336267	1337129	(EPA 537.1)	d5-NEtFOSAA	102	%		1

<b>IX-4-20210621 (202106210629)</b>					<b>Sampled on 06/21/2021 0946</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0079	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	13C2-PFDA	105	%		1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	13C2-PFHxA	110	%		1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	13C3-HFPO-DA	106	%		1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	d3-NMeFOSAA	117	%		1
06/22/21	06/24/21 10:16	1336267	1337129	(EPA 537.1)	d5-NETFOSAA	104	%		1

**GAC-1M-20210621 (202106210630)**

Sampled on 06/21/2021 0949

**EPA 537.1 - EPA Method 537.1**

06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0078	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0045	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.011	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	13C2-PFDA	111	%		1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	13C2-PFHxA	113	%		1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	13C3-HFPO-DA	106	%		1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	d3-NMeFOSAA	109	%		1
06/22/21	06/24/21 10:25	1336267	1337129	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**GAC-2M-20210621 (202106210631)**

Sampled on 06/21/2021 0952

**EPA 537.1 - EPA Method 537.1**

06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0070	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0053	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0037	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.010	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	13C2-PFDA	108	%		1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	13C2-PFHxA	111	%		1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	13C3-HFPO-DA	108	%		1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	d3-NMeFOSAA	112	%		1
06/22/21	06/24/21 10:36	1336267	1337129	(EPA 537.1)	d5-NEtFOSAA	105	%		1

**GAC-3M-20210621 (202106210632)**

Sampled on 06/21/2021 0955

**EPA 537.1 - EPA Method 537.1**

06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0068	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0054	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0020	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.014	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	13C2-PFDA	108	%		1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	13C2-PFHxA	118	%		1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	13C3-HFPO-DA	113	%		1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	d3-NMeFOSAA	118	%		1
06/22/21	06/24/21 10:46	1336267	1337129	(EPA 537.1)	d5-NEtFOSAA	104	%		1

**GAC-4M-20210621 (202106210633)**

**Sampled on 06/21/2021 0958**

**EPA 537.1 - EPA Method 537.1**

06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0041	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0026	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0046	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0045	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	13C2-PFDA	107	%		1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	13C2-PFHxA	109	%		1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	13C3-HFPO-DA	105	%		1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	d3-NMeFOSAA	108	%		1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/22/21	06/24/21 15:54	1336433	1337224	(EPA 537.1)	d5-NEtFOSAA	107	%		1
<b>IX-1M-20210621 (202106210634)</b>					<b>Sampled on 06/21/2021 1001</b>				
<b>EPA 537.1 - EPA Method 537.1</b>									
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0031	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0035	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0020	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0071	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0093	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	13C2-PFDA	103	%		1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	13C2-PFHxA	104	%		1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	13C2-PFOA- IS#1	114	%		1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	13C3-HFPO-DA	101	%		1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	d3-NMeFOSAA	104	%		1
06/22/21	06/24/21 16:03	1336433	1337224	(EPA 537.1)	d5-NEtFOSAA	107	%		1

**IX-2M-20210621 (202106210635)**

**Sampled on 06/21/2021 1004**

**EPA 537.1 - EPA Method 537.1**

06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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 1 800 566 LABS (1 800 566 5227)

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0032	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0020	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0035	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0099	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	13C2-PFDA	102	%		1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	13C2-PFHxA	106	%		1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	13C3-HFPO-DA	104	%		1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	d3-NMeFOSAA	101	%		1
06/22/21	06/24/21 16:13	1336433	1337224	(EPA 537.1)	d5-NETFOSAA	106	%		1

**IX-3M-20210621 (202106210636)**

**Sampled on 06/21/2021 1007**

**EPA 537.1 - EPA Method 537.1**

06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0039	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0035	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0020	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0046	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0086	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	13C2-PFDA	102	%		1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	13C2-PFHxA	105	%		1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	13C3-HFPO-DA	101	%		1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	d3-NMeFOSAA	105	%		1
06/22/21	06/24/21 16:23	1336433	1337224	(EPA 537.1)	d5-NEtFOSAA	108	%		1

**IX-4M-20210621 (202106210637)**

**Sampled on 06/21/2021 1010**

**EPA 537.1 - EPA Method 537.1**

06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0056	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0025	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1

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Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0027	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0074	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	Perfluoroundecanoic acid (PFUNA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	13C2-PFDA	104	%		1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	13C2-PFHxA	111	%		1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	13C3-HFPO-DA	110	%		1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	d3-NMeFOSAA	108	%		1
06/22/21	06/24/21 16:32	1336433	1337224	(EPA 537.1)	d5-NEFOSAA	107	%		1

**LH-INF-20210621 (202106210638)**

**Sampled on 06/21/2021 1013**

**EPA 200.8 - ICPMS Metals**

06/22/21	07/01/21 21:44	1336248	1338562	(EPA 200.8)	Arsenic Total ICAP/MS	3.2	ug/L	1.0	1
06/22/21	07/01/21 21:44	1336248	1338562	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
06/22/21	07/01/21 21:44	1336248	1338562	(EPA 200.8)	Uranium ICAP/MS	5.4	ug/L	1.0	1

**EPA 200.7 - ICP Metals**

06/22/21	06/23/21 14:32	1336248	1336588	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
06/22/21	06/23/21 14:32	1336248	1336588	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.010	1
06/22/21	06/23/21 14:32	1336248	1336588	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
06/22/21	06/23/21 14:32	1336248	1336588	(EPA 200.7)	Potassium Total ICAP	4.6	mg/L	1.0	1
06/22/21	06/23/21 14:32	1336248	1336588	(EPA 200.7)	Sodium Total ICAP	69	mg/L	1.0	1

**SM 5310C - Total Organic Carbon**

06/29/21	17:20		1337835	(SM 5310C)	Total Organic Carbon	1.1	mg/L	0.20	1
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**SM 5310C - Dissolved Organic Carbon**

06/21/21	06/29/21 05:46	1336357	1337650	(SM 5310C)	Dissolved Organic Carbon	0.90	mg/L	0.20	1
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**EPA 200.8 - Uranium by ICPMS as pCi/L**

07/01/21	22:44			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.6 (c)	pCi/L	0.70	1
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**SM 2340B - Total Hardness as CaCO3 by ICP**

06/23/21	16:37			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
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**EPA 218.6 - Hexavalent chromium(Dissolved)**

06/25/21	14:33		1337400	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.76	ug/L	0.020	1
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**EPA 300.0 - Nitrate, Nitrite by EPA 300.0**

06/21/21	17:26		1336233	(EPA 300.0)	Nitrate as Nitrogen by IC	3.0	mg/L	1.0	10
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Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	06/21/21 17:26		1336233	(EPA 300.0)	Nitrate as NO3 (calc)	13	mg/L	4.4	10
	06/21/21 17:26		1336233	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.12	10
	06/21/21 17:26		1336233	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	3.0	mg/L	0.10	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
	06/21/21 17:26		1336235	(EPA 300.0)	Chloride	100	mg/L	5.0	10
	06/21/21 17:26		1336235	(EPA 300.0)	Sulfate	160 (M1,RA)	mg/L	5.0	10
<b>EPA 314.0 - Perchlorate with 2 ug/L MRL</b>									
	06/24/21 03:06	(1)	1336891	(EPA 314.0)	Perchlorate- Low Level	ND	ug/L	2.0	1
<b>EPA 537.1 - EPA Method 537.1</b>									
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0066	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0060	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.029	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	13C2-PFDA	100	%		1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	13C2-PFHxA	110	%		1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	13C3-HFPO-DA	105	%		1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	d3-NMeFOSAA	106	%		1
06/22/21	06/24/21 16:42	1336433	1337224	(EPA 537.1)	d5-NetFOSAA	105	%		1

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**Water Replenishment District**  
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Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 1664 - Oil and Grease by 1664(subbed)</b>									
	06/24/21 16:59			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.954	1
<b>EPA 524.2 - VOC EPA 524.2 Monrovia List</b>									
07/01/21	07/01/21 15:01			(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	2-Chlorotoluene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	4-chlorotoluene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	4-Isopropyltoluene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	4-methyl-2-Pentanone	ND	ug/L	5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Benzene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Bromobenzene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Bromochloromethane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Bromoethane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Bromoform	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Bromomethane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Carbon disulfide	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Chlorobenzene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Chloroethane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Chloroform	0.78	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Chloromethane	ND	ug/L	0.5	1

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Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/01/21	07/01/21 15:01			(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Dibromochloromethane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Dibromomethane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Dichlorodifluoromethane (Freon 12)	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Dichloromethane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Diisopropyl Ether (DIPE)	ND	ug/L	3	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Ethylbenzene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Ethyl-t-Butyl Ether (ETBE)	ND	ug/L	3	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	m,p-Xylene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	m-Dichlorobenzene	ND (*+)	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Naphthalene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	o-Dichlorobenzene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	o-Xylene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	p-Dichlorobenzene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Styrene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Tert-Amyl-Methyl Ether (TAME)	ND	ug/L	3	1
07/01/21	07/01/21 15:01			(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Tetrachloroethylene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Toluene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Total THMs	0.78	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Total Xylenes	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Trichloroethylene	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Trichlorotrifluoroethane (Freon 113)	ND	ug/L	2	1
07/01/21	07/01/21 15:01			(EPA 524.2)	Vinyl chloride	ND	ug/L	0.5	1
07/01/21	07/01/21 15:01			(EPA 524.2)	1,2-Dichlorobenzene-d4	101	%		1

**SM 2320B - Alkalinity in CaCO3 units**

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Laboratory Data

Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

**Water Replenishment District**  
 Joseph Liles  
 4040 Paramount Blvd.  
 Lakewood, CA 90712

Samples Received on:  
 06/21/2021 1311

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	06/23/21 16:39		1336789	(SM 2320B)	Alkalinity in CaCO3 units	190	mg/L	2.0	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>									
06/24/21	06/25/21 21:35	1337163	1337161	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	640	mg/L	10	1
<b>SM 2540D - Total Suspended Solids (TSS)</b>									
	06/28/21 18:03		1337592	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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**Report:** 941985  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District

**Nitrate, Nitrite by EPA 300.0**

**Analytical Batch: 1336233**

202106210638 LH-INF-20210621

**Analysis Date: 06/21/2021**

Analyzed by: A9QW

**Chloride, Sulfate by EPA 300.0**

**Analytical Batch: 1336235**

202106210638 LH-INF-20210621

**Analysis Date: 06/21/2021**

Analyzed by: A9QW

**ICP Metals**

**Prep Batch: 1336248 Analytical Batch: 1336588**

202106210638 LH-INF-20210621

**Analysis Date: 06/23/2021**

Analyzed by: NINA

**Alkalinity in CaCO3 units**

**Analytical Batch: 1336789**

202106210638 LH-INF-20210621

**Analysis Date: 06/23/2021**

Analyzed by: P6LW

**Perchlorate with 2 ug/L MRL**

**Analytical Batch: 1336891**

202106210638 LH-INF-20210621

**Analysis Date: 06/24/2021**

Analyzed by: HL7J

**EPA Method 537.1**

**Prep Batch: 1336267 Analytical Batch: 1337129**

202106210622 GAC-1-20210621  
 202106210623 GAC-2-20210621  
 202106210624 GAC-3-20210621  
 202106210625 GAC-4-20210621  
 202106210626 IX-1-20210621  
 202106210627 IX-2-20210621  
 202106210628 IX-3-20210621  
 202106210629 IX-4-20210621  
 202106210630 GAC-1M-20210621  
 202106210631 GAC-2M-20210621  
 202106210632 GAC-3M-20210621

**Analysis Date: 06/24/2021**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM

**Total Dissolved Solids (TDS)**

**Prep Batch: 1337163 Analytical Batch: 1337161**

202106210638 LH-INF-20210621

**Analysis Date: 06/25/2021**

Analyzed by: TJ52

**EPA Method 537.1**

**Prep Batch: 1336433 Analytical Batch: 1337224**

202106210633 GAC-4M-20210621  
 202106210634 IX-1M-20210621  
 202106210635 IX-2M-20210621  
 202106210636 IX-3M-20210621  
 202106210637 IX-4M-20210621  
 202106210638 LH-INF-20210621

**Analysis Date: 06/24/2021**

Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM  
 Analyzed by: KAM

**Hexavalent chromium(Dissolved)**

**Analytical Batch: 1337400**

**Analysis Date: 06/25/2021**

Tel: (626) 386-1100  
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**Report:** 941985  
**Project:** 0250000  
**Group:** WRD Pilot [Set #1]

Water Replenishment District

202106210638	LH-INF-20210621	Analyzed by: TLH
<b>Total Suspended Solids (TSS)</b>		
<b>Analytical Batch: 1337592</b>		
202106210638	LH-INF-20210621	Analyzed by: TJ52
<b>Dissolved Organic Carbon</b>		
<b>Prep Batch: 1336357 Analytical Batch: 1337650</b>		
202106210638	LH-INF-20210621	Analyzed by: TLL7
<b>Total Organic Carbon</b>		
<b>Analytical Batch: 1337835</b>		
202106210638	LH-INF-20210621	Analyzed by: TLL7
<b>ICPMS Metals</b>		
<b>Prep Batch: 1336248 Analytical Batch: 1338562</b>		
202106210638	LH-INF-20210621	Analyzed by: DHX7

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Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Nitrate, Nitrite by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1336233</b>					<b>Analysis Date: 06/21/2021</b>				
LCS1	Nitrate as Nitrogen by IC		2.5	2.47	mg/L	99	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.45	mg/L	98	(90-110)	20	0.81
MBLK	Nitrate as Nitrogen by IC			<0.0042	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0484	mg/L	97	(50-150)		
MRLLW	Nitrate as Nitrogen by IC		0.013	0.0126	mg/L	101	(50-150)		
MS_202106210638	Nitrate as Nitrogen by IC	3.0	1.3	15.1	mg/L	97	(80-120)		
MS_202106210679	Nitrate as Nitrogen by IC	2.7	1.3	5.27	mg/L	101	(80-120)		
MSD_202106210638	Nitrate as Nitrogen by IC	3.0	1.3	15.2	mg/L	98	(80-120)	20	0.51
MSD_202106210679	Nitrate as Nitrogen by IC	2.7	1.3	5.34	mg/L	104	(80-120)	20	1.4
LCS1	Nitrite Nitrogen by IC		1	1.00	mg/L	100	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.998	mg/L	100	(90-110)	20	1.2
MBLK	Nitrite Nitrogen by IC			<0.0050	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0506	mg/L	101	(50-150)		
MRLLW	Nitrite Nitrogen by IC		0.013	0.0132	mg/L	106	(50-150)		
MS_202106210638	Nitrite Nitrogen by IC	ND	0.5	4.71	mg/L	94	(80-120)		
MS_202106210679	Nitrite Nitrogen by IC	ND	0.5	0.872	mg/L	87	(80-120)		
MSD_202106210638	Nitrite Nitrogen by IC	ND	0.5	4.77	mg/L	95	(80-120)	20	1.2
MSD_202106210679	Nitrite Nitrogen by IC	ND	0.5	0.894	mg/L	89	(80-120)	20	2.5
<b>Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>									
<b>Analytical Batch: 1336235</b>					<b>Analysis Date: 06/21/2021</b>				
LCS1	Chloride		25	26.0	mg/L	104	(90-110)		
LCS2	Chloride		25	25.8	mg/L	103	(90-110)	20	0.77
MBLK	Chloride			<0.1397	mg/L				
MRL_CHK	Chloride		0.5	0.446	mg/L	89	(50-150)		
MS_202106210638	Chloride	100	13	234	mg/L	105	(80-120)		
MSD_202106210638	Chloride	100	13	235	mg/L	106	(80-120)	20	0.62
LCS1	Sulfate		50	51.2	mg/L	102	(90-110)		
LCS2	Sulfate		50	50.8	mg/L	102	(90-110)	20	0.59
MBLK	Sulfate			<0.0614	mg/L				
MRL_CHK	Sulfate		1	0.958	mg/L	96	(50-150)		
MRLLW	Sulfate		0.25	0.247	mg/L	99	(50-150)		
MS_202106210638	Sulfate	160	25	743	mg/L	<b>233</b>	(80-120)		
MSD_202106210638	Sulfate	160	25	462	mg/L	120	(80-120)	20	<b>47</b>

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
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Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>ICP Metals by EPA 200.7</b>									
<b>Analytical Batch: 1336588</b>					<b>Analysis Date: 06/23/2021</b>				
LCS1	Calcium Total ICAP		50	51.4	mg/L	103	(85-115)		
LCS2	Calcium Total ICAP		50	51.6	mg/L	103	(85-115)	20	0.39
MBLK	Calcium Total ICAP			<0.043087	mg/L				
MRL_CHK	Calcium Total ICAP		1	1.02	mg/L	102	(50-150)		
MS_202106210688	Calcium Total ICAP	86	50	133	mg/L	93	(70-130)		
MS2_202106220085	Calcium Total ICAP	44	50	91.7	mg/L	96	(70-130)		
MSD_202106210688	Calcium Total ICAP	86	50	133	mg/L	93	(70-130)	20	0.27
MSD2_202106220085	Calcium Total ICAP	44	50	91.5	mg/L	95	(70-130)	20	0.22
LCS1	Iron Total ICAP		5	5.18	mg/L	104	(85-115)		
LCS2	Iron Total ICAP		5	5.20	mg/L	104	(85-115)	20	0.39
MBLK	Iron Total ICAP			<0.004850	mg/L				
MRL_CHK	Iron Total ICAP		0.01	0.0102	mg/L	102	(50-150)		
MS_202106210688	Iron Total ICAP	ND	5	5.12	mg/L	102	(70-130)		
MS2_202106220085	Iron Total ICAP	ND	5	5.08	mg/L	102	(70-130)		
MSD_202106210688	Iron Total ICAP	ND	5	5.12	mg/L	102	(70-130)	20	0.059
MSD2_202106220085	Iron Total ICAP	ND	5	5.07	mg/L	101	(70-130)	20	0.27
LCS1	Magnesium Total ICAP		20	20.6	mg/L	103	(85-115)		
LCS2	Magnesium Total ICAP		20	20.7	mg/L	103	(85-115)	20	0.48
MBLK	Magnesium Total ICAP			<0.009606	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0984	mg/L	98	(50-150)		
MS_202106210688	Magnesium Total ICAP	13	20	33.3	mg/L	100	(70-130)		
MS2_202106220085	Magnesium Total ICAP	38	20	57.2	mg/L	97	(70-130)		
MSD_202106210688	Magnesium Total ICAP	13	20	33.3	mg/L	100	(70-130)	20	0.085
MSD2_202106220085	Magnesium Total ICAP	38	20	57.0	mg/L	96	(70-130)	20	0.43
LCS1	Potassium Total ICAP		20	20.5	mg/L	103	(85-115)		
LCS2	Potassium Total ICAP		20	20.6	mg/L	103	(85-115)	20	0.49
MBLK	Potassium Total ICAP			<0.233312	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.637	mg/L	64	(50-150)		
MS_202106210688	Potassium Total ICAP	3.5	20	24.9	mg/L	107	(70-130)		
MS2_202106220085	Potassium Total ICAP	3.1	20	24.7	mg/L	108	(70-130)		
MSD_202106210688	Potassium Total ICAP	3.5	20	25.0	mg/L	108	(70-130)	20	0.21
MSD2_202106220085	Potassium Total ICAP	3.1	20	24.6	mg/L	107	(70-130)	20	0.49
LCS1	Sodium Total ICAP		50	51.0	mg/L	102	(85-115)		
LCS2	Sodium Total ICAP		50	50.9	mg/L	102	(85-115)	20	0.20
MBLK	Sodium Total ICAP			<0.4255	mg/L				

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Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Sodium Total ICAP		1	0.932	mg/L	93	(50-150)		
MS_202106210688	Sodium Total ICAP	31	50	79.7	mg/L	97	(70-130)		
MS2_202106220085	Sodium Total ICAP	37	50	84.8	mg/L	96	(70-130)		
MSD_202106210688	Sodium Total ICAP	31	50	79.9	mg/L	97	(70-130)	20	0.25
MSD2_202106220085	Sodium Total ICAP	37	50	84.9	mg/L	96	(70-130)	20	0.080

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1336789

Analysis Date: 06/23/2021

LCS1	Alkalinity in CaCO3 units		100	97.6	mg/L	98	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	97.6	mg/L	98	(90-110)	20	0.0
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.23	mg/L	112	(50-150)		
MS_202011280096	Alkalinity in CaCO3 units	170	100	224	mg/L	<u>58</u>	(80-120)		
MS_202106210648	Alkalinity in CaCO3 units	170	100	276	mg/L	102	(80-120)		
MSD_202011280096	Alkalinity in CaCO3 units	170	100	231	mg/L	<u>65</u>	(80-120)	20	3.1
MSD_202106210648	Alkalinity in CaCO3 units	170	100	272	mg/L	97	(80-120)	20	1.6

Perchlorate with 2 ug/L MRL by EPA 314.0

Analytical Batch: 1336891

Analysis Date: 06/23/2021

LCS1	Perchlorate- Low Level		10	10.4	ug/L	104	(85-115)		
LCS2	Perchlorate- Low Level		10	10.2	ug/L	102	(85-115)	15	1.9
MBLK	Perchlorate- Low Level			<1	ug/L				
MRL_CHK	Perchlorate- Low Level		2	2.03	ug/L	102	(75-125)		
MS2_202106170794	Perchlorate- Low Level	ND	10	10.1	ug/L	101	(80-120)		
MSD2_202106170794	Perchlorate- Low Level	ND	10	10.1	ug/L	101	(80-120)	15	0.10

EPA Method 537.1 by EPA 537.1

Prep Batch: 1336267 Analytical Batch: 1337129

Analysis Date: 06/24/2021

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0473	ug/L	101	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0465	ug/L	99	(70-130)	30	1.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00216	ug/L	115	(50-150)		
MS_202106210209	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00205	ug/L	109	(50-150)		
MSD_202106210209	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00200	ug/L	106	(50-150)	50	2.4
LCS3	13C2-PFDA (S)		100	112	%	112	(70-130)		
LCS4	13C2-PFDA (S)		100	110	%	110	(70-130)		
MBLK	13C2-PFDA (S)			114	%	114	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	115	%	115	(70-130)		
MS_202106210209	13C2-PFDA (S)		100	108	%	108	(70-130)		

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RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202106210209	13C2-PFDA (S)		100	109	%	109	(70-130)		
LCS3	13C2-PFHxA (S)		100	112	%	112	(70-130)		
LCS4	13C2-PFHxA (S)		100	110	%	110	(70-130)		
MBLK	13C2-PFHxA (S)			112	%	112	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	115	%	115	(70-130)		
MS_202106210209	13C2-PFHxA (S)		100	110	%	110	(70-130)		
MSD_202106210209	13C2-PFHxA (S)		100	111	%	111	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			107	%	107	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
MS_202106210209	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
MSD_202106210209	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
MBLK	13C3-HFPO-DA (S)			104	%	104	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	110	%	110	(70-130)		
MS_202106210209	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
MSD_202106210209	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	110	%	110	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			108	%	108	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	112	%	112	(50-150)		
MS_202106210209	13C4-PFOS- IS#2 (I)		100	115	%	115	(50-150)		
MSD_202106210209	13C4-PFOS- IS#2 (I)		100	111	%	111	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0466	ug/L	96	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0477	ug/L	98	(70-130)	30	2.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00223	ug/L	118	(50-150)		
MS_202106210209	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00214	ug/L	113	(50-150)		
MSD_202106210209	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00219	ug/L	116	(50-150)	50	2.4
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0481	ug/L	103	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0475	ug/L	102	(70-130)	30	1.3
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00216	ug/L	116	(50-150)		
MS_202106210209	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00213	ug/L	115	(50-150)		
MSD_202106210209	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00212	ug/L	114	(50-150)	50	0.53
LCS3	d3-NMeFOSAA (I)		100	122	%	122	(50-150)		

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	d3-NMeFOSAA (I)		100	127	%	127	(50-150)		
MBLK	d3-NMeFOSAA (I)			110	%	110	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	126	%	126	(50-150)		
MS_202106210209	d3-NMeFOSAA (I)		100	126	%	126	(50-150)		
MSD_202106210209	d3-NMeFOSAA (I)		100	125	%	125	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	96.1	%	96	(70-130)		
MBLK	d5-NEtFOSAA (S)			110	%	110	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
MS_202106210209	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MSD_202106210209	d5-NEtFOSAA (S)		100	104	%	104	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0503	ug/L	101	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0484	ug/L	97	(70-130)	30	3.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202106210209	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00226	ug/L	113	(50-150)		
MSD_202106210209	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00221	ug/L	110	(50-150)	50	2.3
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0479	ug/L	96	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0471	ug/L	94	(70-130)	30	1.7
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00217	ug/L	108	(50-150)		
MS_202106210209	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00219	ug/L	110	(50-150)		
MSD_202106210209	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00211	ug/L	106	(50-150)	50	3.8
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0500	ug/L	100	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0501	ug/L	100	(70-130)	30	0.20
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00233	ug/L	116	(50-150)		
MS_202106210209	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00219	ug/L	109	(50-150)		
MSD_202106210209	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00226	ug/L	113	(50-150)	50	3.3
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0459	ug/L	104	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0454	ug/L	102	(70-130)	30	1.1
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00206	ug/L	116	(50-150)		
MS_202106210209	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00204	ug/L	115	(50-150)		
MSD_202106210209	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00202	ug/L	114	(50-150)	50	0.98
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0513	ug/L	103	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0533	ug/L	107	(70-130)	30	3.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00251	ug/L	125	(50-150)		
MS_202106210209	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00237	ug/L	119	(50-150)		
MSD_202106210209	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00248	ug/L	124	(50-150)	50	4.8
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0526	ug/L	105	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0528	ug/L	106	(70-130)	30	0.38
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00239	ug/L	119	(50-150)		
MS_202106210209	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00228	ug/L	114	(50-150)		
MSD_202106210209	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00236	ug/L	118	(50-150)	50	3.6
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0509	ug/L	102	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0510	ug/L	102	(70-130)	30	0.20
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202106210209	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00228	ug/L	113	(50-150)		
MSD_202106210209	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00231	ug/L	114	(50-150)	50	1.2
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0472	ug/L	103	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0470	ug/L	103	(70-130)	30	0.43
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00223	ug/L	122	(50-150)		
MS_202106210209	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00211	ug/L	116	(50-150)		
MSD_202106210209	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00224	ug/L	123	(50-150)	50	5.8
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0505	ug/L	101	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0512	ug/L	102	(70-130)	30	1.4
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00237	ug/L	118	(50-150)		
MS_202106210209	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00241	ug/L	116	(50-150)		
MSD_202106210209	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00240	ug/L	116	(50-150)	50	0.17
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0546	ug/L	109	(70-130)	30	2.8
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00252	ug/L	126	(50-150)		
MS_202106210209	Perfluorononanoic acid (PFNA)	ND	0.002	0.00243	ug/L	122	(50-150)		
MSD_202106210209	Perfluorononanoic acid (PFNA)	ND	0.002	0.00259	ug/L	130	(50-150)	50	6.3
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0482	ug/L	104	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0476	ug/L	103	(70-130)	30	1.3
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00222	ug/L	120	(50-150)		
MS_202106210209	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00220	ug/L	119	(50-150)		

Spike recovery is already corrected for native results.  
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202106210209	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00219	ug/L	119	(50-150)	50	0.41
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0522	ug/L	104	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0521	ug/L	104	(70-130)	30	0.19
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00245	ug/L	122	(50-150)		
MS_202106210209	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00240	ug/L	114	(50-150)		
MSD_202106210209	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00250	ug/L	119	(50-150)	50	4.3
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0576	ug/L	115	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0587	ug/L	117	(70-130)	30	1.9
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00282	ug/L	141	(50-150)		
MS_202106210209	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00285	ug/L	134	(50-150)		
MSD_202106210209	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00295	ug/L	139	(50-150)	50	3.4
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0521	ug/L	104	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0531	ug/L	106	(70-130)	30	1.9
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202106210209	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00225	ug/L	112	(50-150)		
MSD_202106210209	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00237	ug/L	119	(50-150)	50	5.2
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0518	ug/L	104	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0523	ug/L	105	(70-130)	30	0.96
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202106210209	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00235	ug/L	118	(50-150)		
MSD_202106210209	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00239	ug/L	120	(50-150)	50	1.7

**Total Dissolved Solids (TDS) by E160.1/SM2540C**

Analytical Batch: 1337161

Analysis Date: 06/25/2021

DUP_202106210638	Total Dissolved Solid (TDS)	640	630	mg/L	(0-10)	10	1.6
DUP_202106230259	Total Dissolved Solid (TDS)	270	272	mg/L	(0-10)	10	2.2
LCS1	Total Dissolved Solid (TDS)		175	178	mg/L	102	(80-114)
LCS2	Total Dissolved Solid (TDS)		700	688	mg/L	98	(80-114)
MBLK	Total Dissolved Solid (TDS)			<5	mg/L		
MRL_CHK	Total Dissolved Solid (TDS)		10	10.0	mg/L	100	(50-150)

**EPA Method 537.1 by EPA 537.1**

Prep Batch: 1336433 Analytical Batch: 1337224

Analysis Date: 06/24/2021

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0444	ug/L	94	(70-130)
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0456	ug/L	97	(70-130)

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00206	ug/L	110	(50-150)		
MS1_202106140027	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0244	ug/L	104	(70-130)		
MSD1_202106140027	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0244	ug/L	103	(70-130)	30	0.071
LCS3	13C2-PFDA (S)		100	102	%	102	(70-130)		
LCS4	13C2-PFDA (S)		100	98.4	%	98	(70-130)		
MBLK	13C2-PFDA (S)			94.3	%	94	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	104	%	104	(70-130)		
MS1_202106140027	13C2-PFDA (S)		100	112	%	112	(70-130)		
MSD1_202106140027	13C2-PFDA (S)		100	106	%	106	(70-130)		
LCS3	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS4	13C2-PFHxA (S)		100	112	%	112	(70-130)		
MBLK	13C2-PFHxA (S)			102	%	102	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MS1_202106140027	13C2-PFHxA (S)		100	120	%	120	(70-130)		
MSD1_202106140027	13C2-PFHxA (S)		100	110	%	110	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			112	%	112	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
MS1_202106140027	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MSD1_202106140027	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
MBLK	13C3-HFPO-DA (S)			95.4	%	95	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MS1_202106140027	13C3-HFPO-DA (S)		100	116	%	116	(70-130)		
MSD1_202106140027	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			110	%	110	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	108	%	108	(50-150)		
MS1_202106140027	13C4-PFOS- IS#2 (I)		100	104	%	105	(50-150)		
MSD1_202106140027	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0454	ug/L	94	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0461	ug/L	95	(70-130)	30	1.5
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00210	ug/L	111	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202106140027	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0253	ug/L	107	(70-130)		
MSD1_202106140027	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0253	ug/L	107	(70-130)	30	0.093
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0440	ug/L	95	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0463	ug/L	100	(70-130)	30	4.9
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00207	ug/L	111	(50-150)		
MS1_202106140027	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0254	ug/L	109	(70-130)		
MSD1_202106140027	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0248	ug/L	106	(70-130)	30	2.2
LCS3	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	96.9	%	97	(50-150)		
MBLK	d3-NMeFOSAA (I)			100	%	101	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MS1_202106140027	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MSD1_202106140027	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	103	%	103	(70-130)		
MBLK	d5-NEtFOSAA (S)			101	%	101	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
MS1_202106140027	d5-NEtFOSAA (S)		100	108	%	108	(70-130)		
MSD1_202106140027	d5-NEtFOSAA (S)		100	102	%	103	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0483	ug/L	97	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0493	ug/L	99	(70-130)	30	2.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00215	ug/L	107	(50-150)		
MS1_202106140027	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0265	ug/L	106	(70-130)		
MSD1_202106140027	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0255	ug/L	102	(70-130)	30	3.9
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0479	ug/L	96	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0482	ug/L	97	(70-130)	30	0.62
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00221	ug/L	110	(50-150)		
MS1_202106140027	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0258	ug/L	103	(70-130)		
MSD1_202106140027	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0256	ug/L	103	(70-130)	30	0.74
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0486	ug/L	97	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0491	ug/L	98	(70-130)	30	1.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00231	ug/L	116	(50-150)		
MS1_202106140027	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0258	ug/L	103	(70-130)		
MSD1_202106140027	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0259	ug/L	103	(70-130)	30	0.28

Spike recovery is already corrected for native results.  
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
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 (I) - Indicates internal standard compound.

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Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0431	ug/L	97	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0445	ug/L	101	(70-130)	30	3.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00190	ug/L	107	(50-150)		
MS1_202106140027	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0244	ug/L	110	(70-130)		
MSD1_202106140027	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0237	ug/L	107	(70-130)	30	2.9
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0480	ug/L	96	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0474	ug/L	95	(70-130)	30	1.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00218	ug/L	109	(50-150)		
MS1_202106140027	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0267	ug/L	107	(70-130)		
MSD1_202106140027	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0267	ug/L	107	(70-130)	30	0.14
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0487	ug/L	97	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0484	ug/L	97	(70-130)	30	0.62
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00215	ug/L	108	(50-150)		
MS1_202106140027	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0255	ug/L	102	(70-130)		
MSD1_202106140027	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0262	ug/L	105	(70-130)	30	2.7
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0493	ug/L	99	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0505	ug/L	101	(70-130)	30	2.4
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00222	ug/L	111	(50-150)		
MS1_202106140027	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0272	ug/L	109	(70-130)		
MSD1_202106140027	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0269	ug/L	108	(70-130)	30	1.2
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0445	ug/L	98	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0488	ug/L	107	(70-130)	30	9.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00206	ug/L	113	(50-150)		
MS1_202106140027	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0258	ug/L	113	(70-130)		
MSD1_202106140027	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0253	ug/L	111	(70-130)	30	1.8
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0490	ug/L	98	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0494	ug/L	99	(70-130)	30	1.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00219	ug/L	110	(50-150)		
MS1_202106140027	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0268	ug/L	107	(70-130)		
MSD1_202106140027	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0265	ug/L	106	(70-130)	30	1.2
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0538	ug/L	108	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0548	ug/L	110	(70-130)	30	1.8

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00247	ug/L	123	(50-150)		
MS1_202106140027	Perfluorononanoic acid (PFNA)	ND	0.025	0.0288	ug/L	115	(70-130)		
MSD1_202106140027	Perfluorononanoic acid (PFNA)	ND	0.025	0.0284	ug/L	114	(70-130)	30	0.92
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0450	ug/L	97	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0475	ug/L	103	(70-130)	30	5.4
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00210	ug/L	113	(50-150)		
MS1_202106140027	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0255	ug/L	110	(70-130)		
MSD1_202106140027	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0254	ug/L	110	(70-130)	30	0.082
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0517	ug/L	103	(70-130)	30	1.2
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00242	ug/L	121	(50-150)		
MS1_202106140027	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0268	ug/L	107	(70-130)		
MSD1_202106140027	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0274	ug/L	109	(70-130)	30	2.5
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0500	ug/L	100	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0484	ug/L	97	(70-130)	30	3.3
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00232	ug/L	116	(50-150)		
MS1_202106140027	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0273	ug/L	109	(70-130)		
MSD1_202106140027	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0266	ug/L	106	(70-130)	30	2.5
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0471	ug/L	94	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0475	ug/L	95	(70-130)	30	0.85
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00214	ug/L	107	(50-150)		
MS1_202106140027	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0252	ug/L	101	(70-130)		
MSD1_202106140027	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0254	ug/L	102	(70-130)	30	0.88
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0463	ug/L	93	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0460	ug/L	92	(70-130)	30	0.65
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00202	ug/L	101	(50-150)		
MS1_202106140027	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0260	ug/L	104	(70-130)		
MSD1_202106140027	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0252	ug/L	101	(70-130)	30	3.2

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1337400

Analysis Date: 06/25/2021

LCS1	Hexavalent chromium(Dissolved)	2	1.92	ug/L	96	(90-110)		
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Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 941985  
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 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Hexavalent chromium(Dissolved)		2	1.89	ug/L	95	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0158	ug/L	79	(50-150)		
MS_202106250221	Hexavalent chromium(Dissolved)	4.0	2	6.08	ug/L	103	(90-110)		
MSD_202106250221	Hexavalent chromium(Dissolved)	4.0	2	6.10	ug/L	104	(90-110)	20	0.38

**Total Suspended Solids (TSS) by SM 2540D**  
**Analytical Batch: 1337592**

Analysis Date: 06/28/2021

DUP_202105190045	Total Suspended Solids (TSS)	360		354	mg/L		(0-10)	10	2.2
DUP_202105190074	Total Suspended Solids (TSS)	92		84.0	mg/L		(0-10)	10	9.1
LCS1	Total Suspended Solids (TSS)		175	146	mg/L	83	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	148	mg/L	85	(71-107)	20	1.4
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	8.00	mg/L	80	(50-150)		

**Dissolved Organic Carbon by SM 5310C**  
**Analytical Batch: 1337650**

Analysis Date: 06/29/2021

LCS1	Dissolved Organic Carbon		5	4.91	mg/L	98	(90-110)		
LCS2	Dissolved Organic Carbon		5	4.87	mg/L	98	(90-110)	20	0.82
MBLK	Dissolved Organic Carbon			<0.10	mg/L				
MRL_CHK	Dissolved Organic Carbon		0.2	0.268	mg/L	134	(50-150)		
MS_202106280120	Dissolved Organic Carbon	2.7	4	6.31	mg/L	91	(80-120)		
MS2_202106280121	Dissolved Organic Carbon	3.2	2	5.17	mg/L	99	(80-120)		
MSD_202106280120	Dissolved Organic Carbon	2.7	4	6.86	mg/L	105	(80-120)	20	8.3
MSD2_202106280121	Dissolved Organic Carbon	3.2	2	5.43	mg/L	112	(80-120)	20	4.9

**Total Organic Carbon by SM 5310C**  
**Analytical Batch: 1337835**

Analysis Date: 06/29/2021

LCS1	Total Organic Carbon		5	4.93	mg/L	99	(90-110)		
LCS2	Total Organic Carbon		5	4.98	mg/L	100	(90-110)	20	1.0
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.274	mg/L	137	(50-150)		
MS_202106230218	Total Organic Carbon	1.5	4	5.31	mg/L	96	(80-120)		
MS2_202106230217	Total Organic Carbon	5.2	2	7.03	mg/L	93	(80-120)		
MSD_202106230218	Total Organic Carbon	1.5	4	5.55	mg/L	102	(80-120)	20	4.4
MSD2_202106230217	Total Organic Carbon	5.2	2	7.01	mg/L	91	(80-120)	20	0.30

**ICPMS Metals by EPA 200.8**

Analytical Batch: 1338562

Analysis Date: 07/01/2021

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 941985  
 Project: 0250000  
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Arsenic Total ICAP/MS		50	51.8	ug/L	104	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	52.6	ug/L	105	(85-115)	20	1.5
MBLK	Arsenic Total ICAP/MS			<0.4134	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.11	ug/L	111	(50-150)		
MS_202106220052	Arsenic Total ICAP/MS	10	50	66.2	ug/L	112	(70-130)		
MS2_202106180530	Arsenic Total ICAP/MS	2	50	56.8	ug/L	110	(70-130)		
MSD_202106220052	Arsenic Total ICAP/MS	10	50	67.3	ug/L	114	(70-130)	20	1.6
MSD2_202106180530	Arsenic Total ICAP/MS	2	50	50.7	ug/L	97	(70-130)	20	11
LCS1	Manganese Total ICAP/MS		100	104	ug/L	104	(85-115)		
LCS2	Manganese Total ICAP/MS		100	106	ug/L	106	(85-115)	20	1.9
MBLK	Manganese Total ICAP/MS			<0.4606	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.06	ug/L	103	(50-150)		
MS_202106220052	Manganese Total ICAP/MS	ND	100	103	ug/L	103	(70-130)		
MS2_202106180530	Manganese Total ICAP/MS	ND	100	104	ug/L	104	(70-130)		
MSD_202106220052	Manganese Total ICAP/MS	ND	100	105	ug/L	105	(70-130)	20	1.7
MSD2_202106180530	Manganese Total ICAP/MS	ND	100	92.6	ug/L	92	(70-130)	20	12
LCS1	Uranium ICAP/MS		50	52.0	ug/L	104	(85-115)		
LCS2	Uranium ICAP/MS		50	53.2	ug/L	106	(85-115)	20	2.3
MBLK	Uranium ICAP/MS			<0.0872	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.974	ug/L	97	(50-150)		
MS_202106220052	Uranium ICAP/MS	2.2	50	57.7	ug/L	111	(70-130)		
MS2_202106180530	Uranium ICAP/MS	ND	50	57.2	ug/L	114	(70-130)		
MSD_202106220052	Uranium ICAP/MS	2.2	50	60.1	ug/L	116	(70-130)	20	4.0
MSD2_202106180530	Uranium ICAP/MS	ND	50	50.7	ug/L	101	(70-130)	20	12

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray**

Project:  
 Phone #:  
 Date Received:  
 Sampled By:  
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 07/06/2021

**Report of Analysis by 18-Hour Collilert Test for  
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_  
 Comment: \_\_\_\_\_  
 Approved by: \_\_\_\_\_

Date of Issue: 07/06/2021

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for  
Presence or Absence, Quantification of Total Coliform and  
E.coli**

PO #:  
Project:  
Phone #:

Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

\*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: \_\_\_\_\_

Comment: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date of Issue: 07/06/2021

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for  
Presence or Absence of Total Coliform and E.Coli**

Attn: \_\_\_\_\_

Project: \_\_\_\_\_  
 Phone #: \_\_\_\_\_  
 Date Received: \_\_\_\_\_  
 Sampled By: \_\_\_\_\_  
 Sample Project Group: \_\_\_\_\_

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:  
 P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for  
Presence or Absence, Quantification of Total Coliform and E. Coli  
By Quantitray**

Project:  
Phone #:  
Date Received:  
Sampled By:  
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

\* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required \_\_\_\_\_

Approved by \_\_\_\_\_

Date of Issue: 07/06/2021

Quant Report - Page 1 of 1

, Tel Fax

## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-62496-1  
Client Project/Site: 941985

For:  
Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Monrovia, California 91016

Attn: Jaclyn Contreras



---

Authorized for release by:  
7/2/2021 5:41:04 PM  
Sheila Luu, Project Mgmt. Assistant  
[Sheila.Luu@eurofinset.com](mailto:Sheila.Luu@eurofinset.com)

Designee for  
Xuan Dang, Project Manager I  
(714)895-5494  
[Xuan.Dang@eurofinset.com](mailto:Xuan.Dang@eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 570-62496-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⌘	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 570-62496-1

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**Job ID: 570-62496-1**

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**Laboratory: Eurofins Calscience LLC**

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**Narrative**

**Job Narrative**  
**570-62496-1**

**Comments**

No additional comments.

**Receipt**

The sample was received on 6/22/2021 11:45 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-159519.LCS/LCSD performed to meet QC requirement.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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# Detection Summary

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 570-62496-1

**Client Sample ID: 202106210638**

**Lab Sample ID: 570-62496-1**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 570-62496-1

## General Chemistry

Client Sample ID: 202106210638

Date Collected: 06/21/21 10:13

Date Received: 06/22/21 11:45

Lab Sample ID: 570-62496-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.954	0.487	mg/L		06/24/21 10:36	06/24/21 16:59	1

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# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 570-62496-1

## Method: 1664A - Oil and Grease

**Lab Sample ID: MB 570-159519/1-A**  
**Matrix: Water**  
**Analysis Batch: 159648**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 159519**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.510	mg/L		06/24/21 10:36	06/24/21 16:59	1

**Lab Sample ID: LCS 570-159519/2-A**  
**Matrix: Water**  
**Analysis Batch: 159648**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 159519**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	36.40		mg/L		91	78 - 114

**Lab Sample ID: LCSD 570-159519/3-A**  
**Matrix: Water**  
**Analysis Batch: 159648**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 159519**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	36.50		mg/L		91	78 - 114	0	18

# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 570-62496-1

## General Chemistry

### Prep Batch: 159519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-62496-1	202106210638	Total/NA	Water	1664A	
MB 570-159519/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-159519/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-159519/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

### Analysis Batch: 159648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-62496-1	202106210638	Total/NA	Water	1664A	159519
MB 570-159519/1-A	Method Blank	Total/NA	Water	1664A	159519
LCS 570-159519/2-A	Lab Control Sample	Total/NA	Water	1664A	159519
LCSD 570-159519/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	159519

# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 570-62496-1

**Client Sample ID: 202106210638**

**Lab Sample ID: 570-62496-1**

**Date Collected: 06/21/21 10:13**

**Matrix: Water**

**Date Received: 06/22/21 11:45**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1048 mL	1000 mL	159519	06/24/21 10:36	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			159648	06/24/21 16:59	L6IE	ECL 1

Instrument ID: GCMSLL

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 570-62496-1

## Laboratory: Eurofins Calscience LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2944	09-30-21
Oregon	NELAP	CA300001	01-30-22

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# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 570-62496-1

Method	Method Description	Protocol	Laboratory
1664A	Oil and Grease	40CFR136A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

**Protocol References:**

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 570-62496-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-62496-1	202106210638	Water	06/21/21 10:13	06/22/21 11:45	

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Eaton Analytical

Ship To:  
Eurofins CalScience  
7440 Lincoln Way  
Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax 714-894-7501

Folder #: 941985 Report Due: 07/05/2021

Sample ID: 202106210638

Client Sample ID for reference on: LH-INF-20210621

Sample type: Sample Event: Sample Point ID: Facility ID: Static ID: JLS

Method: EPA 1664

Prep Method: Analysis Requested: Oil and Grease by 1664(subbed)



570-62496 Chain of Custody

Reports: Jackie Contreras Sub-Contracting Administrator  
EMAIL TO: Eaton-MonroviaSubContract@eurofins.com  
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
Phone (626) 386-1165 Fax (626) 386-1122  
Invoices to: Eurofins Eaton Analytical, LLC  
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the  
Specified State Certification # and  
Exp Date for requested tests + matrix.  
Samples from: CALIFORNIA

### Submittal Form

Date: 6/22/2021

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!  
Report & Invoice must have the Folder# 941985 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report.  
Results must have Complete data & QC with Approval Signature.

Relinquished by: Xen Sample Control Date: 6/22/21 Time: 1145  
Received by: Jackie Date: 6/22/21 Time: 1445  
Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipts requested to attn Jackie Contreras

2/2/20 SF



# Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-62496-1

**Login Number: 62496**

**List Source: Eurofins Calscience LLC**

**List Number: 1**

**Creator: Ramos, Maribel**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## ANALYTICAL REPORT

Eurofins Calscience Irvine  
17461 Derian Ave  
Suite 100  
Irvine, CA 92614-5817  
Tel: (949)261-1022

Laboratory Job ID: 440-285374-1  
Client Project/Site: 941985

For:  
Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Suite 100  
Monrovia, California 91016

Attn: Subcontract Eurofins Eaton Analytical



Authorized for release by:  
7/2/2021 5:01:44 PM

Jennifer Moffatt, Project Manager I  
(949)260-3226  
[Jennifer.Moffatt@Eurofinset.com](mailto:Jennifer.Moffatt@Eurofinset.com)

### LINKS

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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-285374-1	202106210638	Water	06/21/21 10:13	06/30/21 14:20	

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# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

---

## Job ID: 440-285374-1

---

### Laboratory: Eurofins Calscience Irvine

#### Narrative

---

#### Job Narrative 440-285374-1

#### Comments

No additional comments.

#### Receipt

The sample was received on 6/30/2021 2:20 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.6° C.

#### GC/MS VOA

Method 524.2: The continuing calibration verification (CCV) associated with batch 440-651006 recovered above the upper control limit for 1,3-Dichlorobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 524.2: The laboratory control sample (LCS) for analytical batch 440-651006 recovered outside control limits for the following analytes: 1,3-Dichlorobenzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.





# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

**Client Sample ID: 202106210638**

**Lab Sample ID: 440-285374-1**

Date Collected: 06/21/21 10:13

Matrix: Water

Date Received: 06/30/21 14:20

**Method: 524.2 - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.17	ug/L			07/01/21 15:01	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Acrylonitrile	ND		1.0	0.50	ug/L			07/01/21 15:01	1
1,1,2-Trichloroethane	ND		0.50	0.19	ug/L			07/01/21 15:01	1
Allyl chloride	ND		0.50	0.20	ug/L			07/01/21 15:01	1
1,1-Dichloroethane	ND		0.50	0.15	ug/L			07/01/21 15:01	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Bromobenzene	ND		0.50	0.17	ug/L			07/01/21 15:01	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Bromochloromethane	ND		0.50	0.20	ug/L			07/01/21 15:01	1
1,2-Dichlorobenzene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
1,2-Dichloroethane	ND		0.50	0.19	ug/L			07/01/21 15:01	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Bromomethane	ND		0.50	0.20	ug/L			07/01/21 15:01	1
1,3-Dichloropropane, Total	ND		0.50	0.19	ug/L			07/01/21 15:01	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			07/01/21 15:01	1
1,4-Dichlorobenzene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
n-Butylbenzene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Benzene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
sec-Butylbenzene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Dibromochloromethane	ND		0.50	0.20	ug/L			07/01/21 15:01	1
tert-Butylbenzene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Bromoform	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Carbon disulfide	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Carbon tetrachloride	ND		0.50	0.18	ug/L			07/01/21 15:01	1
Chlorobenzene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
<b>Chloroform</b>	<b>0.78</b>		0.50	0.17	ug/L			07/01/21 15:01	1
1-Chlorobutane	ND		0.50	0.20	ug/L			07/01/21 15:01	1
cis-1,2-Dichloroethene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Chloroethane	ND		0.50	0.26	ug/L			07/01/21 15:01	1
cis-1,3-Dichloropropane	ND		0.50	0.19	ug/L			07/01/21 15:01	1
Bromodichloromethane	ND		0.50	0.19	ug/L			07/01/21 15:01	1
Chloromethane	ND		0.50	0.30	ug/L			07/01/21 15:01	1
Dichlorodifluoromethane	ND		0.50	0.23	ug/L			07/01/21 15:01	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Ethylbenzene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Ethyl-t-butyl ether (ETBE)	ND		3.0	1.5	ug/L			07/01/21 15:01	1
m,p-Xylene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.25	ug/L			07/01/21 15:01	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.20	ug/L			07/01/21 15:01	1
1,2-Dibromoethane (EDB)	ND		0.50	0.15	ug/L			07/01/21 15:01	1
Dichloromethane	ND		0.50	0.40	ug/L			07/01/21 15:01	1
Dibromomethane	ND		0.50	0.20	ug/L			07/01/21 15:01	1
o-Xylene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Styrene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
1,3-Dichlorobenzene	ND	*+	0.50	0.20	ug/L			07/01/21 15:01	1
Tert-amyl-methyl ether (TAME)	ND		3.0	1.5	ug/L			07/01/21 15:01	1
Tetrachloroethene	ND		0.50	0.20	ug/L			07/01/21 15:01	1

# Client Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

**Client Sample ID: 202106210638**

**Lab Sample ID: 440-285374-1**

**Date Collected: 06/21/21 10:13**

**Matrix: Water**

**Date Received: 06/30/21 14:20**

**Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	ND		1.0	0.50	ug/L			07/01/21 15:01	1
Toluene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
trans-1,2-Dichloroethene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
trans-1,3-Dichloropropene	ND		0.50	0.14	ug/L			07/01/21 15:01	1
Trichloroethene	ND		0.50	0.17	ug/L			07/01/21 15:01	1
Trichlorofluoromethane	ND		0.50	0.16	ug/L			07/01/21 15:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.50	ug/L			07/01/21 15:01	1
<b>Trihalomethanes, Total</b>	<b>0.86</b>		0.50	0.20	ug/L			07/01/21 15:01	1
1,3-Dichloropropane	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Vinyl chloride	ND		0.50	0.20	ug/L			07/01/21 15:01	1
2,2-Dichloropropane	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Xylenes, Total	ND		0.50	0.20	ug/L			07/01/21 15:01	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Diethyl ether	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Ethyl methacrylate	ND		2.0	0.67	ug/L			07/01/21 15:01	1
Hexachlorobutadiene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Hexachloroethane	ND		1.0	0.42	ug/L			07/01/21 15:01	1
Isopropylbenzene	ND		0.50	0.25	ug/L			07/01/21 15:01	1
4-Isopropyltoluene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Methyl Acrylonitrile	ND		2.0	0.50	ug/L			07/01/21 15:01	1
Methyl acrylate	ND		2.0	0.50	ug/L			07/01/21 15:01	1
Iodomethane	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Methyl methacrylate	ND		2.0	0.63	ug/L			07/01/21 15:01	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			07/01/21 15:01	1
Naphthalene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Nitrobenzene	ND		10	5.0	ug/L			07/01/21 15:01	1
N-Propylbenzene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.20	ug/L			07/01/21 15:01	1
Tetrahydrofuran	ND		2.0	1.0	ug/L			07/01/21 15:01	1
1,2,3-Trichlorobenzene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
1,2,3-Trichloropropane	ND		0.50	0.20	ug/L			07/01/21 15:01	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
1,3,5-Trimethylbenzene	ND		0.50	0.20	ug/L			07/01/21 15:01	1
1,1-Dichloro-2-propanone	ND		5.0	2.5	ug/L			07/01/21 15:01	1
Isopropyl Ether (DIPE)	ND		3.0	1.5	ug/L			07/01/21 15:01	1
Bromoethane	ND		0.50	0.20	ug/L			07/01/21 15:01	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					07/01/21 15:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4	101		70 - 130		07/01/21 15:01	1
4-Bromofluorobenzene (Surr)	78		70 - 130		07/01/21 15:01	1

# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL IRV

**Protocol References:**

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

**Laboratory References:**

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022



# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

**Client Sample ID: 202106210638**

**Lab Sample ID: 440-285374-1**

**Date Collected: 06/21/21 10:13**

**Matrix: Water**

**Date Received: 06/30/21 14:20**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	651006	07/01/21 15:01	N5PD	TAL IRV

**Laboratory References:**

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

- 1
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# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 440-651006/3**  
**Matrix: Water**  
**Analysis Batch: 651006**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	ND		0.50	0.17	ug/L			07/01/21 08:39	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Acrylonitrile	ND		1.0	0.50	ug/L			07/01/21 08:39	1
1,1,2-Trichloroethane	ND		0.50	0.19	ug/L			07/01/21 08:39	1
Allyl chloride	ND		0.50	0.20	ug/L			07/01/21 08:39	1
1,1-Dichloroethane	ND		0.50	0.15	ug/L			07/01/21 08:39	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Bromobenzene	ND		0.50	0.17	ug/L			07/01/21 08:39	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Bromochloromethane	ND		0.50	0.20	ug/L			07/01/21 08:39	1
1,2-Dichlorobenzene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
1,2-Dichloroethane	ND		0.50	0.19	ug/L			07/01/21 08:39	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Bromomethane	ND		0.50	0.20	ug/L			07/01/21 08:39	1
1,3-Dichloropropene, Total	ND		0.50	0.19	ug/L			07/01/21 08:39	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			07/01/21 08:39	1
1,4-Dichlorobenzene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
n-Butylbenzene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Benzene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
sec-Butylbenzene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Dibromochloromethane	ND		0.50	0.20	ug/L			07/01/21 08:39	1
tert-Butylbenzene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Bromoform	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Carbon disulfide	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Carbon tetrachloride	ND		0.50	0.18	ug/L			07/01/21 08:39	1
Chlorobenzene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Chloroform	ND		0.50	0.17	ug/L			07/01/21 08:39	1
1-Chlorobutane	ND		0.50	0.20	ug/L			07/01/21 08:39	1
cis-1,2-Dichloroethene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Chloroethane	ND		0.50	0.26	ug/L			07/01/21 08:39	1
cis-1,3-Dichloropropene	ND		0.50	0.19	ug/L			07/01/21 08:39	1
Bromodichloromethane	ND		0.50	0.19	ug/L			07/01/21 08:39	1
Chloromethane	ND		0.50	0.30	ug/L			07/01/21 08:39	1
Dichlorodifluoromethane	ND		0.50	0.23	ug/L			07/01/21 08:39	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Ethylbenzene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Ethyl-t-butyl ether (ETBE)	ND		3.0	1.5	ug/L			07/01/21 08:39	1
m,p-Xylene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.25	ug/L			07/01/21 08:39	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.20	ug/L			07/01/21 08:39	1
1,2-Dibromoethane (EDB)	ND		0.50	0.15	ug/L			07/01/21 08:39	1
Dichloromethane	ND		0.50	0.40	ug/L			07/01/21 08:39	1
Dibromomethane	ND		0.50	0.20	ug/L			07/01/21 08:39	1
o-Xylene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Styrene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Tert-amyl-methyl ether (TAME)	ND		3.0	1.5	ug/L			07/01/21 08:39	1

Eurofins Calscience Irvine

# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-651006/3**  
**Matrix: Water**  
**Analysis Batch: 651006**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.50	ug/L			07/01/21 08:39	1
Toluene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
trans-1,2-Dichloroethene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
trans-1,3-Dichloropropene	ND		0.50	0.14	ug/L			07/01/21 08:39	1
Trichloroethene	ND		0.50	0.17	ug/L			07/01/21 08:39	1
Trichlorofluoromethane	ND		0.50	0.16	ug/L			07/01/21 08:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.50	ug/L			07/01/21 08:39	1
Trihalomethanes, Total	ND		0.50	0.20	ug/L			07/01/21 08:39	1
1,3-Dichloropropane	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Vinyl chloride	ND		0.50	0.20	ug/L			07/01/21 08:39	1
2,2-Dichloropropane	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Xylenes, Total	ND		0.50	0.20	ug/L			07/01/21 08:39	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Diethyl ether	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Ethyl methacrylate	ND		2.0	0.67	ug/L			07/01/21 08:39	1
Hexachlorobutadiene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Hexachloroethane	ND		1.0	0.42	ug/L			07/01/21 08:39	1
Isopropylbenzene	ND		0.50	0.25	ug/L			07/01/21 08:39	1
4-Isopropyltoluene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Methyl Acrylonitrile	ND		2.0	0.50	ug/L			07/01/21 08:39	1
Methyl acrylate	ND		2.0	0.50	ug/L			07/01/21 08:39	1
Iodomethane	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Methyl methacrylate	ND		2.0	0.63	ug/L			07/01/21 08:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			07/01/21 08:39	1
Naphthalene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Nitrobenzene	ND		10	5.0	ug/L			07/01/21 08:39	1
N-Propylbenzene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.20	ug/L			07/01/21 08:39	1
Tetrahydrofuran	ND		2.0	1.0	ug/L			07/01/21 08:39	1
1,2,3-Trichlorobenzene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
1,2,3-Trichloropropane	ND		0.50	0.20	ug/L			07/01/21 08:39	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
1,3,5-Trimethylbenzene	ND		0.50	0.20	ug/L			07/01/21 08:39	1
1,1-Dichloro-2-propanone	ND		5.0	2.5	ug/L			07/01/21 08:39	1
Isopropyl Ether (DIPE)	ND		3.0	1.5	ug/L			07/01/21 08:39	1
Bromoethane	ND		0.50	0.20	ug/L			07/01/21 08:39	1

<i>Tentatively Identified Compound</i>	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
<i>Tentatively Identified Compound</i>	None		ug/L					07/01/21 08:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4	96		70 - 130		07/01/21 08:39	1
4-Bromofluorobenzene (Surr)	79		70 - 130		07/01/21 08:39	1

# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-651006/1002**

**Matrix: Water**

**Analysis Batch: 651006**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	9.37		ug/L		94	70 - 130
1,1,2,2-Tetrachloroethane	10.0	9.96		ug/L		100	70 - 130
Acrylonitrile	10.0	9.09		ug/L		91	70 - 130
1,1,2-Trichloroethane	10.0	9.63		ug/L		96	70 - 130
Allyl chloride	10.0	8.35		ug/L		84	70 - 130
1,1-Dichloroethane	10.0	8.96		ug/L		90	70 - 130
1,1-Dichloroethene	10.0	8.60		ug/L		86	70 - 130
Bromobenzene	10.0	12.1		ug/L		121	70 - 130
1,2,4-Trichlorobenzene	10.0	12.3		ug/L		123	70 - 130
Bromochloromethane	10.0	11.6		ug/L		116	70 - 130
1,2-Dichlorobenzene	10.0	12.4		ug/L		124	70 - 130
1,2-Dichloroethane	10.0	8.47		ug/L		85	70 - 130
1,2-Dichloropropane	10.0	8.68		ug/L		87	70 - 130
Bromomethane	10.0	9.30		ug/L		93	70 - 130
2-Butanone (MEK)	10.0	9.84		ug/L		98	70 - 130
1,4-Dichlorobenzene	10.0	12.3		ug/L		123	70 - 130
n-Butylbenzene	10.0	10.8		ug/L		108	70 - 130
Benzene	10.0	8.98		ug/L		90	70 - 130
sec-Butylbenzene	10.0	12.4		ug/L		124	70 - 130
Dibromochloromethane	10.0	10.5		ug/L		105	70 - 130
tert-Butylbenzene	10.0	12.0		ug/L		120	70 - 130
Bromoform	10.0	11.6		ug/L		116	70 - 130
Carbon disulfide	10.0	9.89		ug/L		99	70 - 130
Carbon tetrachloride	10.0	10.4		ug/L		104	70 - 130
Chlorobenzene	10.0	10.4		ug/L		104	70 - 130
Chloroform	10.0	9.57		ug/L		96	70 - 130
1-Chlorobutane	10.0	8.34		ug/L		83	70 - 130
cis-1,2-Dichloroethene	10.0	9.46		ug/L		95	70 - 130
Chloroethane	10.0	8.57		ug/L		86	70 - 130
cis-1,3-Dichloropropene	10.0	8.92		ug/L		89	70 - 130
Bromodichloromethane	10.0	8.79		ug/L		88	70 - 130
Chloromethane	10.0	8.25		ug/L		82	70 - 130
Dichlorodifluoromethane	10.0	8.70		ug/L		87	70 - 130
2-Chlorotoluene	10.0	10.1		ug/L		101	70 - 130
Ethylbenzene	10.0	9.71		ug/L		97	70 - 130
4-Chlorotoluene	10.0	10.2		ug/L		102	70 - 130
Ethyl-t-butyl ether (ETBE)	10.0	8.56		ug/L		86	70 - 130
m,p-Xylene	20.0	21.2		ug/L		106	70 - 130
1,2-Dibromo-3-Chloropropane	10.0	12.3		ug/L		123	70 - 130
Methyl-t-Butyl Ether (MTBE)	20.0	16.4		ug/L		82	70 - 130
1,2-Dibromoethane (EDB)	10.0	10.1		ug/L		101	70 - 130
Dichloromethane	10.0	9.20		ug/L		92	70 - 130
Dibromomethane	10.0	9.12		ug/L		91	70 - 130
o-Xylene	10.0	10.5		ug/L		105	70 - 130
Styrene	10.0	10.9		ug/L		109	70 - 130
1,3-Dichlorobenzene	10.0	13.7	+	ug/L		137	70 - 130
Tert-amyl-methyl ether (TAME)	10.0	7.32		ug/L		73	70 - 130
Tetrachloroethene	10.0	10.8		ug/L		108	70 - 130

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# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-651006/1002**  
**Matrix: Water**  
**Analysis Batch: 651006**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,4-Dichloro-2-butene	10.0	9.06		ug/L		91	70 - 130
Toluene	10.0	9.66		ug/L		97	70 - 130
trans-1,2-Dichloroethene	10.0	9.40		ug/L		94	70 - 130
trans-1,3-Dichloropropene	10.0	8.58		ug/L		86	70 - 130
Trichloroethene	10.0	10.3		ug/L		103	70 - 130
Trichlorofluoromethane	10.0	9.76		ug/L		98	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.58		ug/L		86	70 - 130
1,3-Dichloropropane	10.0	8.82		ug/L		88	70 - 130
Vinyl chloride	10.0	8.87		ug/L		89	70 - 130
2,2-Dichloropropane	10.0	10.2		ug/L		102	70 - 130
1,1-Dichloropropene	10.0	8.31		ug/L		83	70 - 130
Diethyl ether	10.0	8.41		ug/L		84	70 - 130
Ethyl methacrylate	10.0	7.70		ug/L		77	70 - 130
Hexachlorobutadiene	10.0	11.7		ug/L		117	70 - 130
Hexachloroethane	10.0	12.7		ug/L		127	70 - 130
Isopropylbenzene	10.0	11.1		ug/L		111	70 - 130
4-Isopropyltoluene	10.0	12.2		ug/L		122	70 - 130
Methyl Acrylonitrile	10.0	8.36		ug/L		84	70 - 130
Methyl acrylate	10.0	8.18		ug/L		82	70 - 130
Iodomethane	10.0	9.36		ug/L		94	70 - 130
Methyl methacrylate	10.0	8.04		ug/L		80	70 - 130
4-Methyl-2-pentanone (MIBK)	10.0	7.17		ug/L		72	70 - 130
Naphthalene	10.0	10.4		ug/L		104	70 - 130
Nitrobenzene	100	105		ug/L		105	70 - 130
N-Propylbenzene	10.0	10.4		ug/L		104	70 - 130
1,1,1,2-Tetrachloroethane	10.0	11.2		ug/L		112	70 - 130
Tetrahydrofuran	10.0	8.95		ug/L		90	70 - 130
1,2,3-Trichlorobenzene	10.0	11.6		ug/L		116	70 - 130
1,2,3-Trichloropropane	10.0	9.51		ug/L		95	70 - 130
1,2,4-Trimethylbenzene	10.0	11.3		ug/L		113	70 - 130
1,3,5-Trimethylbenzene	10.0	11.3		ug/L		113	70 - 130
1,1-Dichloro-2-propanone	10.0	8.93		ug/L		89	70 - 130
Isopropyl Ether (DIPE)	10.0	9.42		ug/L		94	70 - 130
Bromoethane	10.0	9.48		ug/L		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichlorobenzene-d4	123		70 - 130
4-Bromofluorobenzene (Surr)	96		70 - 130

**Lab Sample ID: MRL 440-651006/4**  
**Matrix: Water**  
**Analysis Batch: 651006**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.500	0.532		ug/L		106	50 - 150
1,1,2,2-Tetrachloroethane	0.500	0.508		ug/L		102	50 - 150
1,1,2-Trichloroethane	0.500	0.447	J	ug/L		89	50 - 150
Allyl chloride	0.500	0.462	J	ug/L		92	50 - 150

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# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MRL 440-651006/4**  
**Matrix: Water**  
**Analysis Batch: 651006**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.500	0.529		ug/L		106	50 - 150
1,1-Dichloroethene	0.500	0.495	J	ug/L		99	50 - 150
Bromobenzene	0.500	0.547		ug/L		109	50 - 150
1,2,4-Trichlorobenzene	0.500	0.526		ug/L		105	50 - 150
Bromochloromethane	0.500	0.622		ug/L		124	50 - 150
1,2-Dichlorobenzene	0.500	0.550		ug/L		110	50 - 150
1,2-Dichloroethane	0.500	0.461	J	ug/L		92	50 - 150
1,2-Dichloropropane	0.500	0.515		ug/L		103	50 - 150
Bromomethane	0.500	0.482	J	ug/L		96	50 - 150
1,4-Dichlorobenzene	0.500	0.529		ug/L		106	50 - 150
n-Butylbenzene	0.500	0.437	J	ug/L		87	50 - 150
Benzene	0.500	0.481	J	ug/L		96	50 - 150
sec-Butylbenzene	0.500	0.505		ug/L		101	50 - 150
Dibromochloromethane	0.500	0.586		ug/L		117	50 - 150
tert-Butylbenzene	0.500	0.458	J	ug/L		92	50 - 150
Bromoform	0.500	0.531		ug/L		106	50 - 150
Carbon disulfide	0.500	0.590		ug/L		118	50 - 150
Carbon tetrachloride	0.500	0.502		ug/L		100	50 - 150
Chlorobenzene	0.500	0.554		ug/L		111	50 - 150
Chloroform	0.500	0.592		ug/L		118	50 - 150
1-Chlorobutane	0.500	0.450	J	ug/L		90	50 - 150
cis-1,2-Dichloroethene	0.500	0.534		ug/L		107	50 - 150
Chloroethane	0.500	0.564		ug/L		113	50 - 150
cis-1,3-Dichloropropene	0.500	0.424	J	ug/L		85	50 - 150
Bromodichloromethane	0.500	0.496	J	ug/L		99	50 - 150
Chloromethane	0.500	0.552		ug/L		110	50 - 150
Dichlorodifluoromethane	0.500	0.354	J	ug/L		71	50 - 150
2-Chlorotoluene	0.500	0.436	J	ug/L		87	50 - 150
Ethylbenzene	0.500	0.434	J	ug/L		87	50 - 150
4-Chlorotoluene	0.500	0.437	J	ug/L		87	50 - 150
m,p-Xylene	1.00	0.901		ug/L		90	50 - 150
1,2-Dibromo-3-Chloropropane	0.500	0.504		ug/L		101	50 - 150
Methyl-t-Butyl Ether (MTBE)	1.00	0.967		ug/L		97	50 - 150
1,2-Dibromoethane (EDB)	0.500	0.549		ug/L		110	50 - 150
Dichloromethane	0.500	0.503		ug/L		101	50 - 150
Dibromomethane	0.500	0.564		ug/L		113	50 - 150
o-Xylene	0.500	0.449	J	ug/L		90	50 - 150
Styrene	0.500	0.438	J	ug/L		88	50 - 150
1,3-Dichlorobenzene	0.500	0.548		ug/L		110	50 - 150
Tetrachloroethene	0.500	0.604		ug/L		121	50 - 150
Toluene	0.500	0.472	J	ug/L		94	50 - 150
trans-1,2-Dichloroethene	0.500	0.514		ug/L		103	50 - 150
trans-1,3-Dichloropropene	0.500	0.422	J	ug/L		84	50 - 150
Trichloroethene	0.500	0.512		ug/L		102	50 - 150
Trichlorofluoromethane	0.500	0.520		ug/L		104	50 - 150
1,3-Dichloropropane	0.500	0.462	J	ug/L		92	50 - 150
Vinyl chloride	0.500	0.442	J	ug/L		88	50 - 150
2,2-Dichloropropane	0.500	0.576		ug/L		115	50 - 150
1,1-Dichloropropene	0.500	0.460	J	ug/L		92	50 - 150

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# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MRL 440-651006/4**  
**Matrix: Water**  
**Analysis Batch: 651006**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Diethyl ether	0.500	0.547		ug/L		109	50 - 150
Hexachlorobutadiene	0.500	0.557		ug/L		111	50 - 150
Isopropylbenzene	0.500	0.434	J	ug/L		87	50 - 150
4-Isopropyltoluene	0.500	0.443	J	ug/L		89	50 - 150
Iodomethane	0.500	0.578		ug/L		116	50 - 150
4-Methyl-2-pentanone (MIBK)	5.00	4.06	J	ug/L		81	50 - 150
Naphthalene	0.500	0.526		ug/L		105	50 - 150
Nitrobenzene	10.0	9.64	J	ug/L		96	50 - 150
N-Propylbenzene	0.500	0.456	J	ug/L		91	50 - 150
1,1,1,2-Tetrachloroethane	0.500	0.575		ug/L		115	50 - 150
1,2,3-Trichlorobenzene	0.500	0.566		ug/L		113	50 - 150
1,2,3-Trichloropropane	0.500	0.478	J	ug/L		96	50 - 150
1,2,4-Trimethylbenzene	0.500	0.451	J	ug/L		90	50 - 150
1,3,5-Trimethylbenzene	0.500	0.464	J	ug/L		93	50 - 150
Bromoethane	0.500	0.551		ug/L		110	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
1,2-Dichlorobenzene-d4	102		70 - 130
4-Bromofluorobenzene (Surr)	82		70 - 130

**Lab Sample ID: MRL 440-651006/5**  
**Matrix: Water**  
**Analysis Batch: 651006**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Acrylonitrile	2.00	1.99		ug/L		100	50 - 150
trans-1,4-Dichloro-2-butene	2.00	1.51		ug/L		76	50 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	2.00	1.90	J	ug/L		95	50 - 150
Ethyl methacrylate	2.00	1.46	J	ug/L		73	50 - 150
Hexachloroethane	2.00	2.28		ug/L		114	50 - 150
Methyl Acrylonitrile	2.00	2.04		ug/L		102	50 - 150
Methyl acrylate	2.00	1.92	J	ug/L		96	50 - 150
Methyl methacrylate	2.00	1.74	J	ug/L		87	50 - 150
Tetrahydrofuran	2.00	1.40	J	ug/L		70	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
1,2-Dichlorobenzene-d4	111		70 - 130
4-Bromofluorobenzene (Surr)	85		70 - 130

**Lab Sample ID: MRL 440-651006/6**  
**Matrix: Water**  
**Analysis Batch: 651006**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
2-Butanone (MEK)	5.00	5.29		ug/L		106	50 - 150
Ethyl-t-butyl ether (ETBE)	5.00	4.69		ug/L		94	50 - 150
Tert-amyl-methyl ether (TAME)	5.00	4.21		ug/L		84	50 - 150

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# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MRL 440-651006/6**  
**Matrix: Water**  
**Analysis Batch: 651006**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloro-2-propanone	5.00	4.58	J	ug/L		92	50 - 150
Isopropyl Ether (DIPE)	5.00	5.03		ug/L		101	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
1,2-Dichlorobenzene-d4	122		70 - 130
4-Bromofluorobenzene (Surr)	95		70 - 130

**Lab Sample ID: 570-63029-B-1 MS**  
**Matrix: Water**  
**Analysis Batch: 651006**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		10.0	9.86		ug/L		99	70 - 130
1,1,2,2-Tetrachloroethane	ND		10.0	10.3		ug/L		103	70 - 130
Acrylonitrile	ND		10.0	9.80		ug/L		98	70 - 130
1,1,2-Trichloroethane	ND		10.0	9.53		ug/L		95	70 - 130
Allyl chloride	ND		10.0	8.73		ug/L		87	70 - 130
1,1-Dichloroethane	ND		10.0	9.12		ug/L		91	70 - 130
1,1-Dichloroethene	ND		10.0	9.23		ug/L		92	70 - 130
Bromobenzene	ND		10.0	12.3		ug/L		123	70 - 130
1,2,4-Trichlorobenzene	ND	F1	10.0	13.1	F1	ug/L		131	70 - 130
Bromochloromethane	ND		10.0	10.5		ug/L		105	70 - 130
1,2-Dichlorobenzene	ND	F1	10.0	13.3	F1	ug/L		133	70 - 130
1,2-Dichloroethane	ND		10.0	8.23		ug/L		82	70 - 130
1,2-Dichloropropane	ND		10.0	8.72		ug/L		87	70 - 130
Bromomethane	ND		10.0	9.24		ug/L		92	70 - 130
2-Butanone (MEK)	ND		10.0	10.3		ug/L		103	70 - 130
1,4-Dichlorobenzene	ND		10.0	12.9		ug/L		129	70 - 130
n-Butylbenzene	ND		10.0	11.0		ug/L		110	70 - 130
Benzene	ND		10.0	8.91		ug/L		89	70 - 130
sec-Butylbenzene	ND		10.0	12.6		ug/L		126	70 - 130
Dibromochloromethane	ND		10.0	10.9		ug/L		109	70 - 130
tert-Butylbenzene	ND		10.0	12.2		ug/L		122	70 - 130
Bromoform	ND		10.0	12.5		ug/L		125	70 - 130
Carbon disulfide	ND		10.0	9.77		ug/L		98	70 - 130
Carbon tetrachloride	ND		10.0	10.4		ug/L		104	70 - 130
Chlorobenzene	ND		10.0	11.1		ug/L		111	70 - 130
Chloroform	ND		10.0	9.08		ug/L		91	70 - 130
1-Chlorobutane	ND		10.0	8.95		ug/L		90	70 - 130
cis-1,2-Dichloroethene	ND		10.0	9.65		ug/L		96	70 - 130
Chloroethane	ND		10.0	8.80		ug/L		88	70 - 130
cis-1,3-Dichloropropene	ND		10.0	9.19		ug/L		92	70 - 130
Bromodichloromethane	ND		10.0	9.10		ug/L		91	70 - 130
Chloromethane	ND		10.0	8.01		ug/L		80	70 - 130
Dichlorodifluoromethane	ND		10.0	9.28		ug/L		93	70 - 130
2-Chlorotoluene	ND		10.0	10.1		ug/L		101	70 - 130
Ethylbenzene	ND		10.0	10.1		ug/L		101	70 - 130
4-Chlorotoluene	ND		10.0	10.3		ug/L		103	70 - 130

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# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 570-63029-B-1 MS**

**Matrix: Water**

**Analysis Batch: 651006**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Ethyl-t-butyl ether (ETBE)	ND		10.0	7.99		ug/L		80	70 - 130
m,p-Xylene	ND		20.0	22.2		ug/L		111	70 - 130
1,2-Dibromo-3-Chloropropane	ND	F1	10.0	13.3	F1	ug/L		133	70 - 130
Methyl-t-Butyl Ether (MTBE)	ND		20.0	17.2		ug/L		86	70 - 130
1,2-Dibromoethane (EDB)	ND		10.0	10.1		ug/L		101	70 - 130
Dichloromethane	ND		10.0	9.30		ug/L		93	70 - 130
Dibromomethane	ND		10.0	9.40		ug/L		94	70 - 130
o-Xylene	ND		10.0	11.1		ug/L		111	70 - 130
Styrene	ND		10.0	11.2		ug/L		112	70 - 130
1,3-Dichlorobenzene	ND	F1 **	10.0	13.5	F1	ug/L		135	70 - 130
Tert-amyl-methyl ether (TAME)	ND		10.0	8.26		ug/L		83	70 - 130
Tetrachloroethene	ND		10.0	11.1		ug/L		111	70 - 130
trans-1,4-Dichloro-2-butene	ND		10.0	9.51		ug/L		95	70 - 130
Toluene	ND		10.0	9.88		ug/L		99	70 - 130
trans-1,2-Dichloroethene	ND		10.0	9.69		ug/L		97	70 - 130
trans-1,3-Dichloropropene	ND		10.0	9.08		ug/L		91	70 - 130
Trichloroethene	ND		10.0	10.7		ug/L		107	70 - 130
Trichlorofluoromethane	ND		10.0	10.5		ug/L		105	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10.0	8.88		ug/L		89	70 - 130
1,3-Dichloropropane	ND		10.0	8.89		ug/L		89	70 - 130
Vinyl chloride	ND		10.0	8.83		ug/L		88	70 - 130
2,2-Dichloropropane	ND		10.0	9.11		ug/L		91	70 - 130
1,1-Dichloropropene	ND		10.0	8.21		ug/L		82	70 - 130
Diethyl ether	ND		10.0	9.34		ug/L		93	70 - 130
Ethyl methacrylate	ND		10.0	8.12		ug/L		81	70 - 130
Hexachlorobutadiene	ND		10.0	13.0		ug/L		130	70 - 130
Hexachloroethane	ND		10.0	12.9		ug/L		129	70 - 130
Isopropylbenzene	ND		10.0	11.1		ug/L		111	70 - 130
4-Isopropyltoluene	ND		10.0	13.0		ug/L		130	70 - 130
Methyl Acrylonitrile	ND		10.0	8.21		ug/L		82	70 - 130
Methyl acrylate	ND		10.0	8.55		ug/L		86	70 - 130
Iodomethane	ND		10.0	10.5		ug/L		105	70 - 130
Methyl methacrylate	ND		10.0	7.98		ug/L		80	70 - 130
4-Methyl-2-pentanone (MIBK)	ND		10.0	8.31		ug/L		83	70 - 130
Naphthalene	ND		10.0	11.6		ug/L		116	70 - 130
Nitrobenzene	ND		100	116		ug/L		116	70 - 130
N-Propylbenzene	ND		10.0	10.6		ug/L		106	70 - 130
1,1,1,2-Tetrachloroethane	ND		10.0	11.6		ug/L		116	70 - 130
Tetrahydrofuran	ND	F1	10.0	8.10		ug/L		81	70 - 130
1,2,3-Trichlorobenzene	ND	F1	10.0	13.1	F1	ug/L		131	70 - 130
1,2,3-Trichloropropane	ND		10.0	10.3		ug/L		103	70 - 130
1,2,4-Trimethylbenzene	ND		10.0	11.6		ug/L		116	70 - 130
1,3,5-Trimethylbenzene	ND		10.0	11.4		ug/L		114	70 - 130
1,1-Dichloro-2-propanone	ND		10.0	9.24		ug/L		92	70 - 130
Isopropyl Ether (DIPE)	ND		10.0	9.68		ug/L		97	70 - 130
Bromoethane	ND		10.0	9.83		ug/L		98	70 - 130

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# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 570-63029-B-1 MS**  
**Matrix: Water**  
**Analysis Batch: 651006**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Surrogate	%Recovery	MS MS Qualifier	Limits
1,2-Dichlorobenzene-d4	127		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130

**Lab Sample ID: 570-63029-C-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 651006**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		10.0	9.67		ug/L		97	70 - 130	2	20
1,1,2,2-Tetrachloroethane	ND		10.0	9.92		ug/L		99	70 - 130	4	20
Acrylonitrile	ND		10.0	8.82		ug/L		88	70 - 130	11	20
1,1,2-Trichloroethane	ND		10.0	9.58		ug/L		96	70 - 130	0	20
Allyl chloride	ND		10.0	8.32		ug/L		83	70 - 130	5	20
1,1-Dichloroethane	ND		10.0	9.21		ug/L		92	70 - 130	1	20
1,1-Dichloroethene	ND		10.0	8.93		ug/L		89	70 - 130	3	20
Bromobenzene	ND		10.0	12.3		ug/L		123	70 - 130	0	20
1,2,4-Trichlorobenzene	ND	F1	10.0	12.7		ug/L		127	70 - 130	3	20
Bromochloromethane	ND		10.0	11.5		ug/L		115	70 - 130	10	20
1,2-Dichlorobenzene	ND	F1	10.0	12.9		ug/L		129	70 - 130	3	20
1,2-Dichloroethane	ND		10.0	8.17		ug/L		82	70 - 130	1	20
1,2-Dichloropropane	ND		10.0	8.48		ug/L		85	70 - 130	3	20
Bromomethane	ND		10.0	9.23		ug/L		92	70 - 130	0	20
2-Butanone (MEK)	ND		10.0	10.3		ug/L		103	70 - 130	1	20
1,4-Dichlorobenzene	ND		10.0	12.5		ug/L		125	70 - 130	3	20
n-Butylbenzene	ND		10.0	10.4		ug/L		104	70 - 130	6	20
Benzene	ND		10.0	8.85		ug/L		89	70 - 130	1	20
sec-Butylbenzene	ND		10.0	12.1		ug/L		121	70 - 130	4	20
Dibromochloromethane	ND		10.0	11.5		ug/L		115	70 - 130	5	20
tert-Butylbenzene	ND		10.0	11.7		ug/L		117	70 - 130	4	20
Bromoform	ND		10.0	12.1		ug/L		121	70 - 130	3	20
Carbon disulfide	ND		10.0	9.50		ug/L		95	70 - 130	3	20
Carbon tetrachloride	ND		10.0	10.1		ug/L		101	70 - 130	3	20
Chlorobenzene	ND		10.0	10.8		ug/L		108	70 - 130	3	20
Chloroform	ND		10.0	9.13		ug/L		91	70 - 130	1	20
1-Chlorobutane	ND		10.0	8.74		ug/L		87	70 - 130	2	20
cis-1,2-Dichloroethene	ND		10.0	9.44		ug/L		94	70 - 130	2	20
Chloroethane	ND		10.0	8.36		ug/L		84	70 - 130	5	20
cis-1,3-Dichloropropene	ND		10.0	9.14		ug/L		91	70 - 130	1	20
Bromodichloromethane	ND		10.0	9.34		ug/L		93	70 - 130	3	20
Chloromethane	ND		10.0	8.22		ug/L		82	70 - 130	3	20
Dichlorodifluoromethane	ND		10.0	8.92		ug/L		89	70 - 130	4	20
2-Chlorotoluene	ND		10.0	9.90		ug/L		99	70 - 130	2	20
Ethylbenzene	ND		10.0	9.72		ug/L		97	70 - 130	4	20
4-Chlorotoluene	ND		10.0	9.91		ug/L		99	70 - 130	4	20
Ethyl-t-butyl ether (ETBE)	ND		10.0	8.23		ug/L		82	70 - 130	3	20
m,p-Xylene	ND		20.0	20.8		ug/L		104	70 - 130	6	20
1,2-Dibromo-3-Chloropropane	ND	F1	10.0	12.9		ug/L		129	70 - 130	3	20
Methyl-t-Butyl Ether (MTBE)	ND		20.0	16.8		ug/L		84	70 - 130	2	20

Eurofins Calscience Irvine

# QC Sample Results

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 570-63029-C-1 MSD**

**Client Sample ID: Matrix Spike Duplicate**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 651006**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND		10.0	10.4		ug/L		104	70 - 130	3	20
Dichloromethane	ND		10.0	8.82		ug/L		88	70 - 130	5	20
Dibromomethane	ND		10.0	8.95		ug/L		90	70 - 130	5	20
o-Xylene	ND		10.0	10.6		ug/L		106	70 - 130	5	20
Styrene	ND		10.0	10.5		ug/L		105	70 - 130	6	20
1,3-Dichlorobenzene	ND	F1 *+	10.0	13.2	F1	ug/L		132	70 - 130	2	20
Tert-amyl-methyl ether (TAME)	ND		10.0	8.03		ug/L		80	70 - 130	3	20
Tetrachloroethene	ND		10.0	10.3		ug/L		103	70 - 130	7	20
trans-1,4-Dichloro-2-butene	ND		10.0	9.40		ug/L		94	70 - 130	1	20
Toluene	ND		10.0	9.70		ug/L		97	70 - 130	2	20
trans-1,2-Dichloroethene	ND		10.0	8.84		ug/L		88	70 - 130	9	20
trans-1,3-Dichloropropene	ND		10.0	8.40		ug/L		84	70 - 130	8	20
Trichloroethene	ND		10.0	10.4		ug/L		104	70 - 130	2	20
Trichlorofluoromethane	ND		10.0	10.1		ug/L		101	70 - 130	4	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10.0	8.33		ug/L		83	70 - 130	6	20
1,3-Dichloropropane	ND		10.0	8.75		ug/L		87	70 - 130	2	20
Vinyl chloride	ND		10.0	8.69		ug/L		87	70 - 130	2	20
2,2-Dichloropropane	ND		10.0	9.48		ug/L		95	70 - 130	4	20
1,1-Dichloropropene	ND		10.0	8.32		ug/L		83	70 - 130	1	20
Diethyl ether	ND		10.0	8.93		ug/L		89	70 - 130	4	20
Ethyl methacrylate	ND		10.0	7.61		ug/L		76	70 - 130	7	20
Hexachlorobutadiene	ND		10.0	11.8		ug/L		118	70 - 130	10	20
Hexachloroethane	ND		10.0	12.2		ug/L		122	70 - 130	6	20
Isopropylbenzene	ND		10.0	10.5		ug/L		105	70 - 130	5	20
4-Isopropyltoluene	ND		10.0	12.0		ug/L		120	70 - 130	8	20
Methyl Acrylonitrile	ND		10.0	8.63		ug/L		86	70 - 130	5	20
Methyl acrylate	ND		10.0	8.65		ug/L		87	70 - 130	1	20
Iodomethane	ND		10.0	10.5		ug/L		105	70 - 130	1	20
Methyl methacrylate	ND		10.0	8.05		ug/L		81	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	ND		10.0	7.18		ug/L		72	70 - 130	15	20
Naphthalene	ND		10.0	11.1		ug/L		111	70 - 130	4	20
Nitrobenzene	ND		100	113		ug/L		113	70 - 130	2	20
N-Propylbenzene	ND		10.0	10.0		ug/L		100	70 - 130	5	20
1,1,1,2-Tetrachloroethane	ND		10.0	11.2		ug/L		112	70 - 130	3	20
Tetrahydrofuran	ND	F1	10.0	6.60	F1	ug/L		66	70 - 130	20	20
1,2,3-Trichlorobenzene	ND	F1	10.0	12.5		ug/L		125	70 - 130	4	20
1,2,3-Trichloropropane	ND		10.0	10.3		ug/L		103	70 - 130	0	20
1,2,4-Trimethylbenzene	ND		10.0	10.9		ug/L		109	70 - 130	7	20
1,3,5-Trimethylbenzene	ND		10.0	10.4		ug/L		104	70 - 130	9	20
1,1-Dichloro-2-propanone	ND		10.0	9.63		ug/L		96	70 - 130	4	20
Isopropyl Ether (DIPE)	ND		10.0	9.81		ug/L		98	70 - 130	1	20
Bromoethane	ND		10.0	10.4		ug/L		104	70 - 130	6	20
<b>Surrogate</b>		<b>MSD %Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>							
1,2-Dichlorobenzene-d4		122		70 - 130							
4-Bromofluorobenzene (Surr)		97		70 - 130							

# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

## GC/MS VOA

### Analysis Batch: 651006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-285374-1	202106210638	Total/NA	Water	524.2	
MB 440-651006/3	Method Blank	Total/NA	Water	524.2	
LCS 440-651006/1002	Lab Control Sample	Total/NA	Water	524.2	
MRL 440-651006/4	Lab Control Sample	Total/NA	Water	524.2	
MRL 440-651006/5	Lab Control Sample	Total/NA	Water	524.2	
MRL 440-651006/6	Lab Control Sample	Total/NA	Water	524.2	
570-63029-B-1 MS	Matrix Spike	Total/NA	Water	524.2	
570-63029-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	524.2	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 941985

Job ID: 440-285374-1

## Laboratory: Eurofins Calscience Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2706	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	1,1-Dichloro-2-propanone
524.2		Water	1,1-Dichloropropene
524.2		Water	1,2,3-Trichloropropane
524.2		Water	1,2-Dibromo-3-Chloropropane
524.2		Water	1,2-Dibromoethane (EDB)
524.2		Water	1,3-Dichloropropane
524.2		Water	1,3-Dichloropropene, Total
524.2		Water	1-Chlorobutane
524.2		Water	2,2-Dichloropropane
524.2		Water	2-Butanone (MEK)
524.2		Water	4-Isopropyltoluene
524.2		Water	Acrylonitrile
524.2		Water	Allyl chloride
524.2		Water	Bromobenzene
524.2		Water	Bromochloromethane
524.2		Water	Bromoethane
524.2		Water	Bromomethane
524.2		Water	Chloroethane
524.2		Water	Chloromethane
524.2		Water	Dibromomethane
524.2		Water	Diethyl ether
524.2		Water	Ethyl methacrylate
524.2		Water	Hexachlorobutadiene
524.2		Water	Hexachloroethane
524.2		Water	Iodomethane
524.2		Water	Isopropyl Ether (DIPE)
524.2		Water	Methyl acrylate
524.2		Water	Methyl Acrylonitrile
524.2		Water	Methyl methacrylate
524.2		Water	Nitrobenzene
524.2		Water	Tetrahydrofuran
524.2		Water	trans-1,4-Dichloro-2-butene
524.2		Water	Trihalomethanes, Total
524.2		Water	Xylenes, Total

Submittal Form

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder # 941985 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature

Provide in each Report the Specified State Certification # and Exp. Date for requested tests - matrix. Samples from: CALIFORNIA

Reports: Jackie Contreras Sub-Contracting Administrator  
EMAIL TO: Eaton-MonroviaSubContract@eurofins.com  
Eurofins Eaton Analytical, LLC 760 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
Phone (626) 386-1165 Fax (626) 386-1122  
Invoices to: Eurofins Eaton Analytical, LLC  
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

report needed before 10th of the month  
monrovia 524.2 list

**eurofins**      tag at ic

**Ship To:**  
Eurofins Calscience-Irvine  
17461 Derian Avenue  
Suite 100  
Irvine, CA 92614

Phone: 949-261-1022      Fax: 949-260-3299

**Folder #:** 941985      **Report Due:** 07/05/2021

**Sample ID:** 202106210638      **Client Sample ID for reference onl:** LH-INF-20210621      **Sample Date & Time Matrix:** 06/21/21 1013 DW      **PWS Systemcode:** PWSID      **PWSID:** JLS

**Sample type:**      **Sample Event:**      **Facility ID:**      **Sample Point ID:**      **Static ID:**

**Method:** EPA 524 2      **Prep Method:** EPA 524 2      **Analysis Requested:** VOC EPA 524 2 Monrovia List



610 = 88

**Relinquished by:** Yanung      **Sample Control:** 66-30-26      **Time:** 1230

**Received by:** Jackie Contreras      **Date:** 6/30      **Time:** 1306

**Relinquished by:** [Signature]      **Date:** 6/30      **Time:** 2:20

**Received by:** [Signature]      **Date:** 6/30/21      **Time:** 1220

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS  
An Acknowledgement of Receipt is requested to attn: Jackie Contreras



## Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 440-285374-1

**Login Number: 285374**

**List Source: Eurofins Calscience Irvine**

**List Number: 1**

**Creator: Skinner, Alma D**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

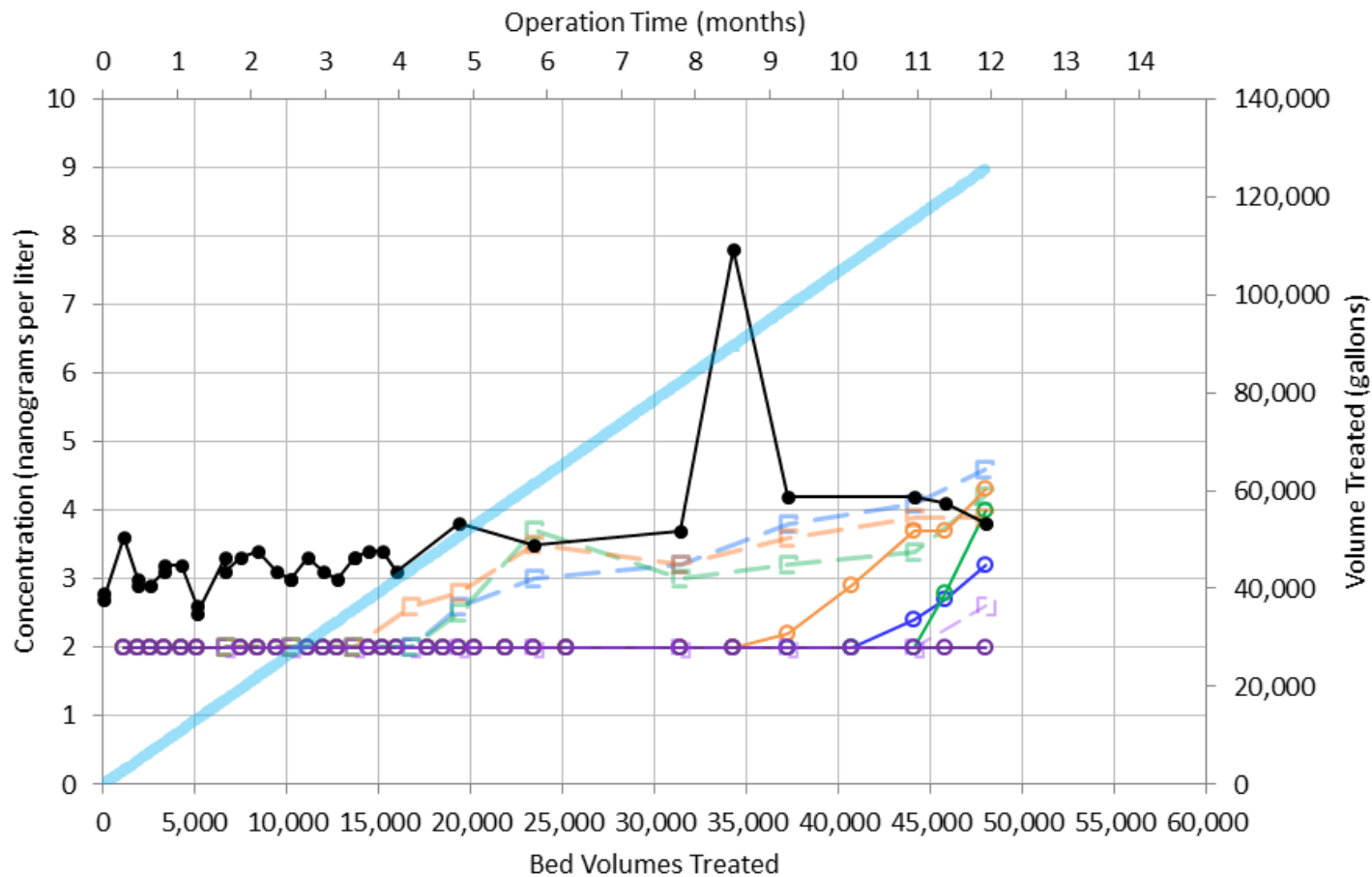
**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED  
CARBON TO TREAT GROUNDWATER IMPACTED WITH  
PER- AND POLYFLUOROALKYL SUBSTANCES  
LA HABRA HEIGHTS COUNTY WATER DISTRICT – WATER SUPPLY WELL #10**

**Appendix D**

***Other PFAS Breakthrough Curves***

- Figure D1 Perfluorohexanoic Acid (PFHxA) GAC Breakthrough Curves*
- Figure D2 Perfluoroheptanoic Acid (PFHpA) GAC Breakthrough Curves*
- Figure D3 Perfluorononanoic Acid (PFNA) GAC Breakthrough Curves*
- Figure D4 Perfluorobutanesulfonic Acid (PFBS) GAC Breakthrough Curves*
- Figure D5 Perfluorohexanesulfonic Acid (PFHxS) GAC Breakthrough Curves*
- Figure D6 Perfluorohexanoic Acid (PFHxA) IX Breakthrough Curves*
- Figure D7 Perfluoroheptanoic Acid (PFHpA) IX Breakthrough Curves*
- Figure D8 Perfluorononanoic Acid (PFNA) IX Breakthrough Curves*
- Figure D9 Perfluorobutanesulfonic Acid (PFBS) IX Breakthrough Curves*
- Figure D10 Perfluorohexanesulfonic Acid (PFHxS) IX Breakthrough Curves*

## LHHCWD Well #10 - Perfluorohexanoic acid (PFHxA) GAC Samples



**Notes:**

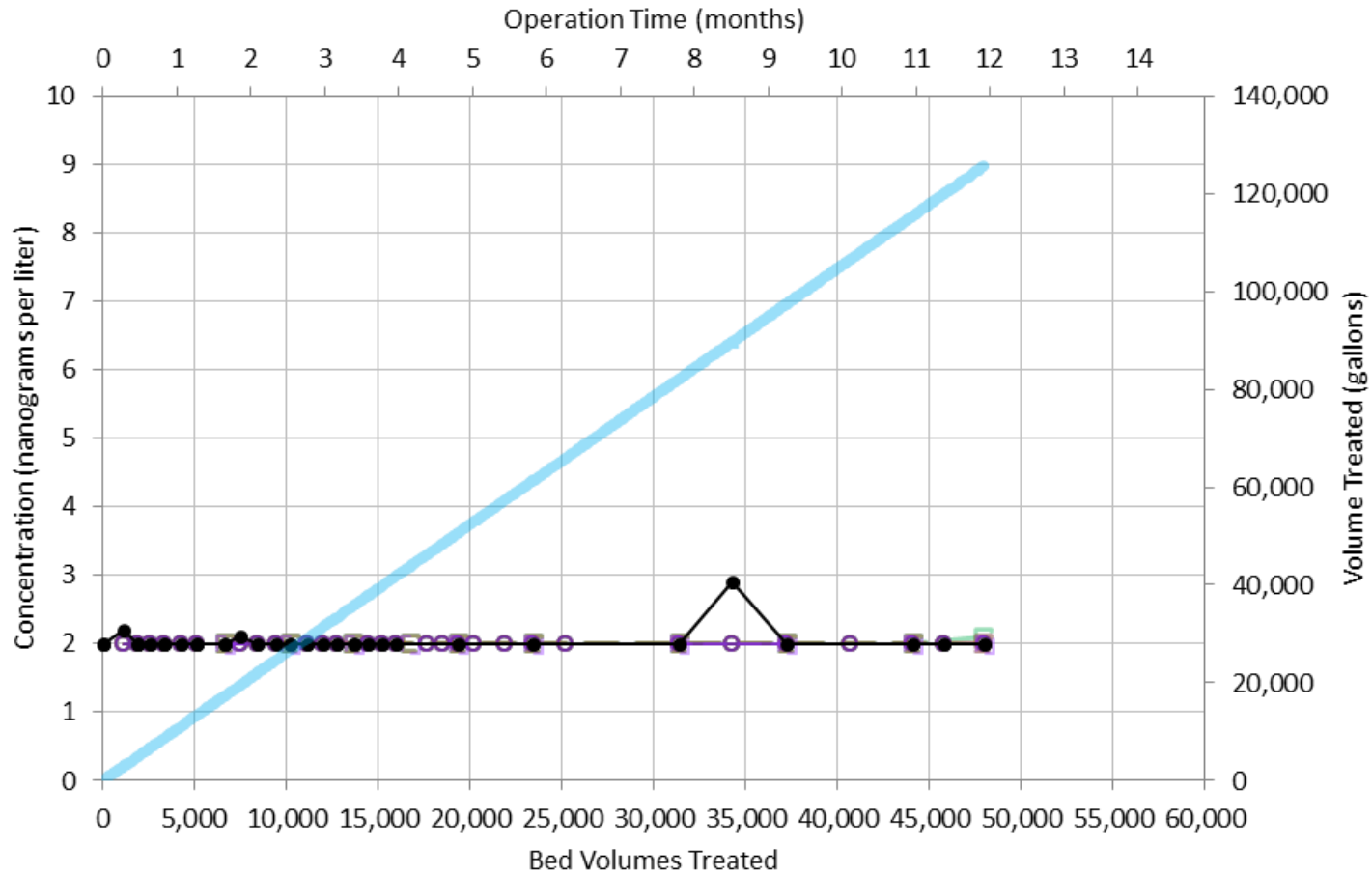
1. "M" on treatment samples indicates mid-point sample (at one half of column bed length).
2. F400 = Filtrasorb 400.
3. GAC = granular activated carbon.
4. LHHCWD = La Habra Heights County Water District.



GSI Job No.	5302	Drawn By:	GM
Issued:	6-Oct-21	Chk'd By:	MJ
Revised:		Apr'd By:	PEG
Scale:		Figure D1	

**PERFLUOROHEXANOIC ACID (PFHxA)  
GAC BREAKTHROUGH CURVES**  
PFAS Treatment Pilot Study  
Water Replenishment District of Southern California

## LHHCWD Well #10 - Perfluoroheptanoic acid (PFHpA) GAC Samples



**Notes:**

1. "M" on treatment samples indicates mid-point sample (at one half of column bed length).
2. F400 = Filtrasorb 400.
3. GAC = granular activated carbon.
4. LHHCWD = La Habra Heights County Water District.

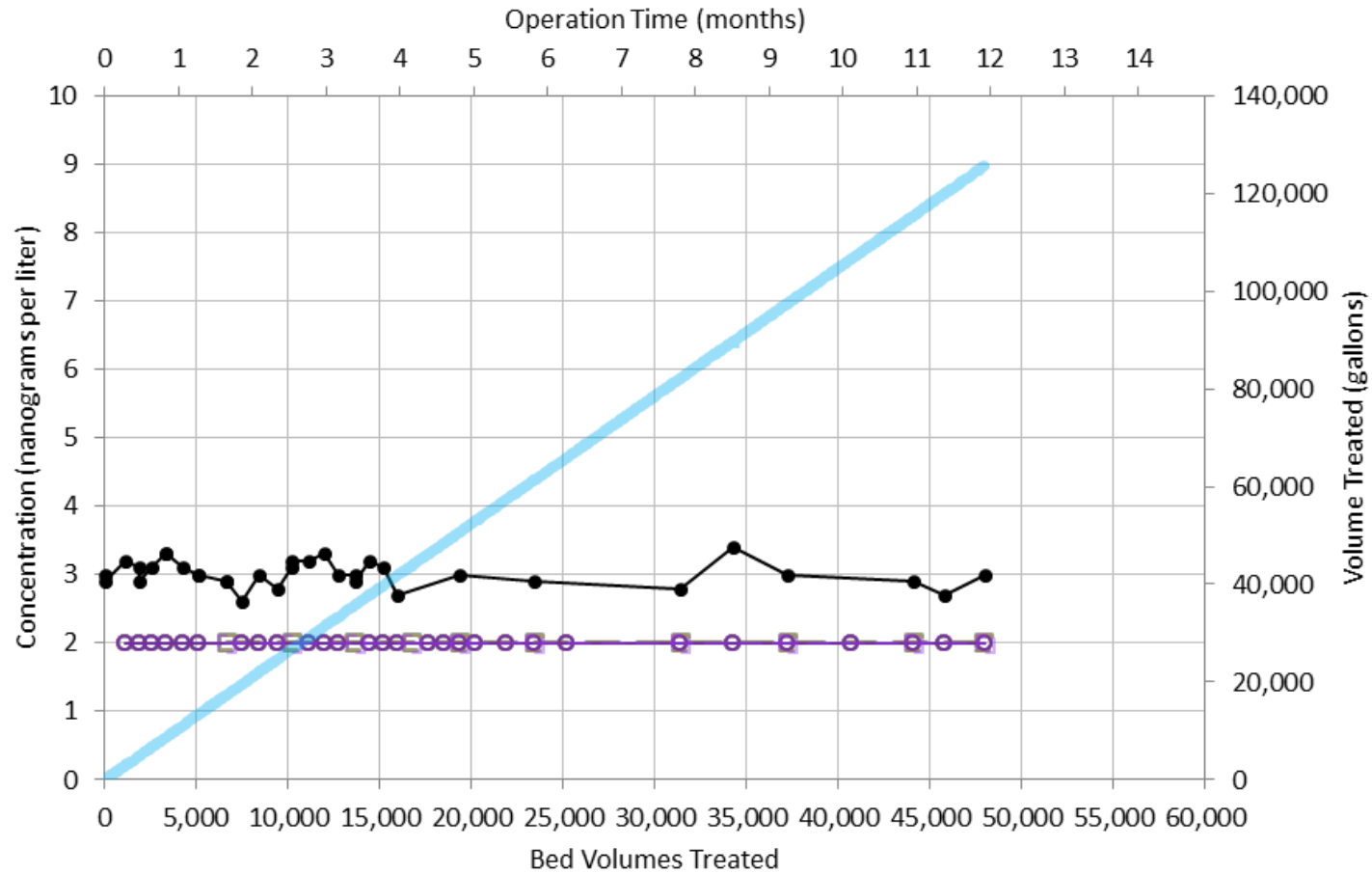
- AV1240CB
- AV1240CB M
- AV1240LDX
- AV1240LDX M
- AV1240FPAS
- AV1240FPAS M
- F400
- F400 M
- Influent
- Water Volume Treated



GSI Job No.	5302	Drawn By:	GM
Issued:	6-Oct-21	Chk'd By:	MJ
Revised:		Apr'd By:	PEG
Scale:		Figure D2	

**PERFLUOROHEPTANOIC ACID (PFHpA)  
GAC BREAKTHROUGH CURVES**  
PFAS Treatment Pilot Study  
Water Replenishment District of Southern California

## LHHCWD Well #10 - Perfluorononanoic acid (PFNA) GAC Samples



**Notes:**

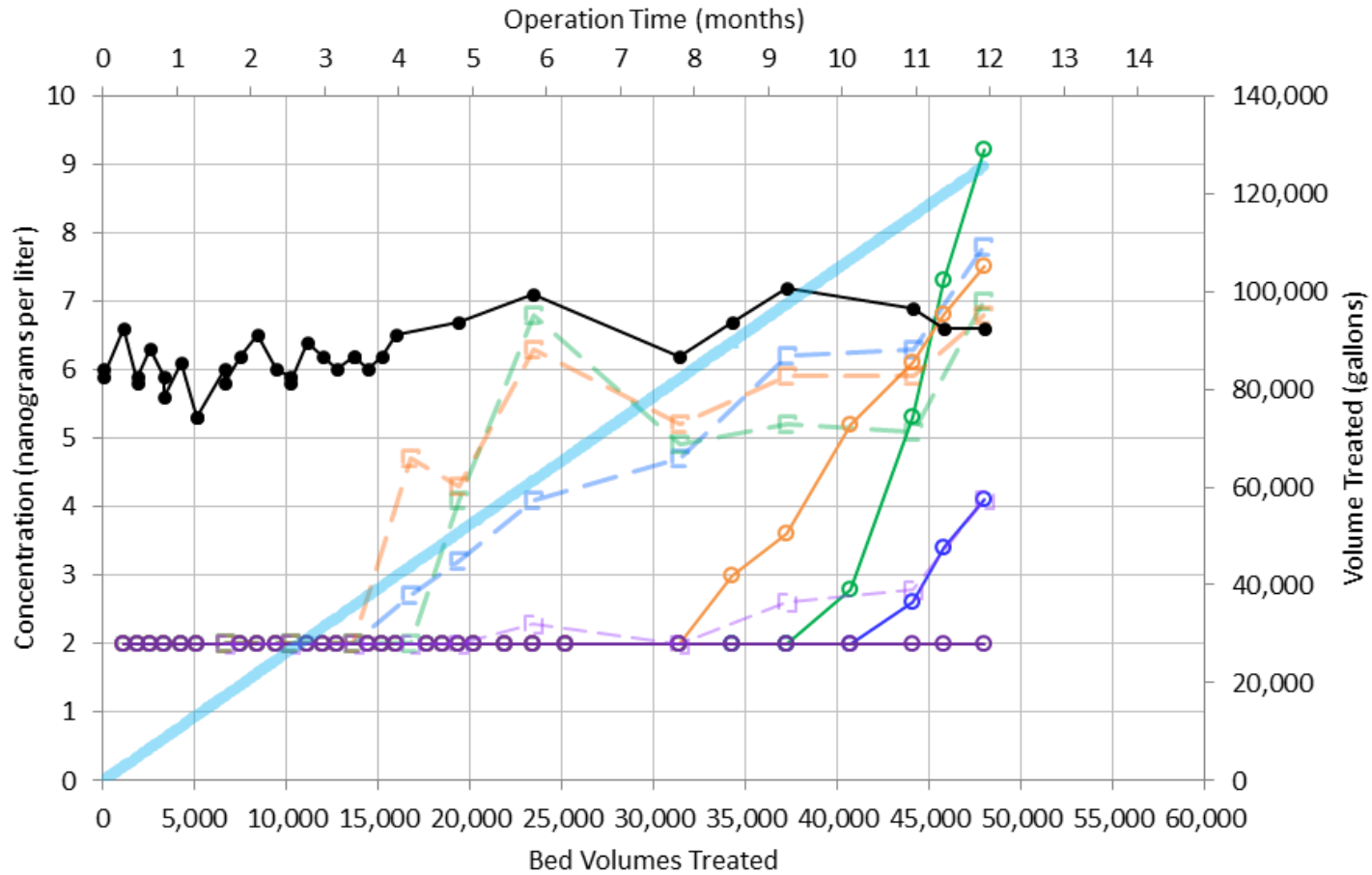
1. "M" on treatment samples indicates mid-point sample (at one half of column bed length).
2. F400 = Filtrasorb 400.
3. GAC = granular activated carbon.
4. LHHCWD = La Habra Heights County Water District.



GSI Job No.	5302	Drawn By:	GM
Issued:	6-Oct-21	Chk'd By:	MJ
Revised:		Aprv'd By:	PEG
Scale:		Figure D3	

**PERFLUORONONANOIC ACID (PFNA)  
GAC BREAKTHROUGH CURVES**  
PFAS Treatment Pilot Study  
Water Replenishment District of Southern California

## LHHCWD Well #10 - Perfluorobutanesulfonic acid (PFBS) GAC Samples



**Notes:**

1. "M" on treatment samples indicates mid-point sample (at one half of column bed length).
2. F400 = Filtrasorb 400.
3. GAC = granular activated carbon.
4. LHHCWD = La Habra Heights County Water District.

- AV1240CB
- AV1240CB M
- AV1240LDX
- AV1240LDX M
- AV1240FPAS
- AV1240FPAS M
- F400
- F400 M
- Influent
- Water Volume Treated

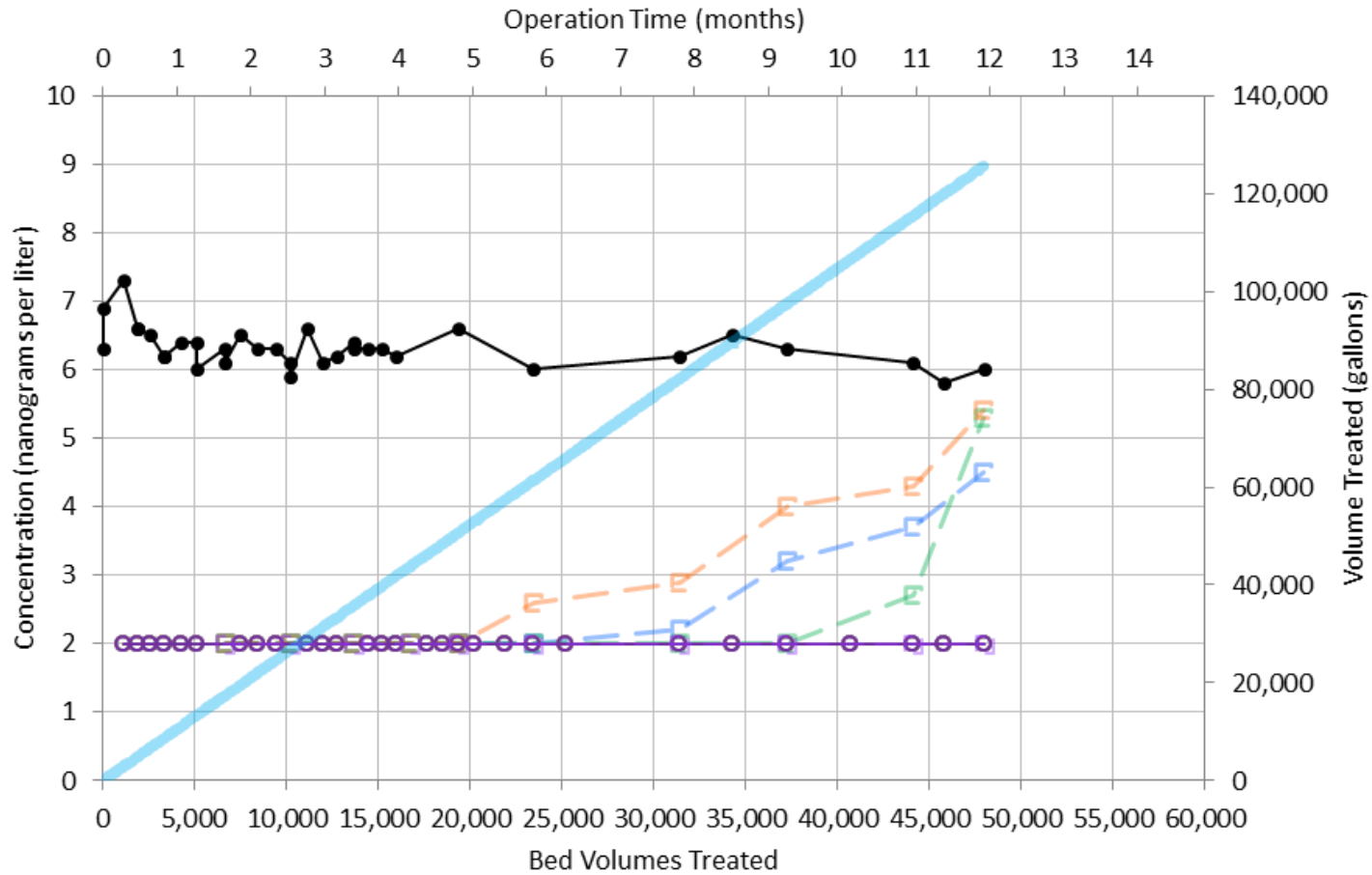


GSI Job No. 5302	Drawn By: GM
Issued: 6-Oct-21	Chk'd By: MJ
Revised:	Aprv'd By: PEG
Scale:	Figure D4

**PERFLUOROBUTANESULFONIC ACID (PFBS)  
GAC BREAKTHROUGH CURVES**  
PFAS Treatment Pilot Study  
Water Replenishment District of Southern California



## LHHCWD Well #10 - Perfluorohexanesulfonic acid (PFHxS) GAC Samples



**Notes:**

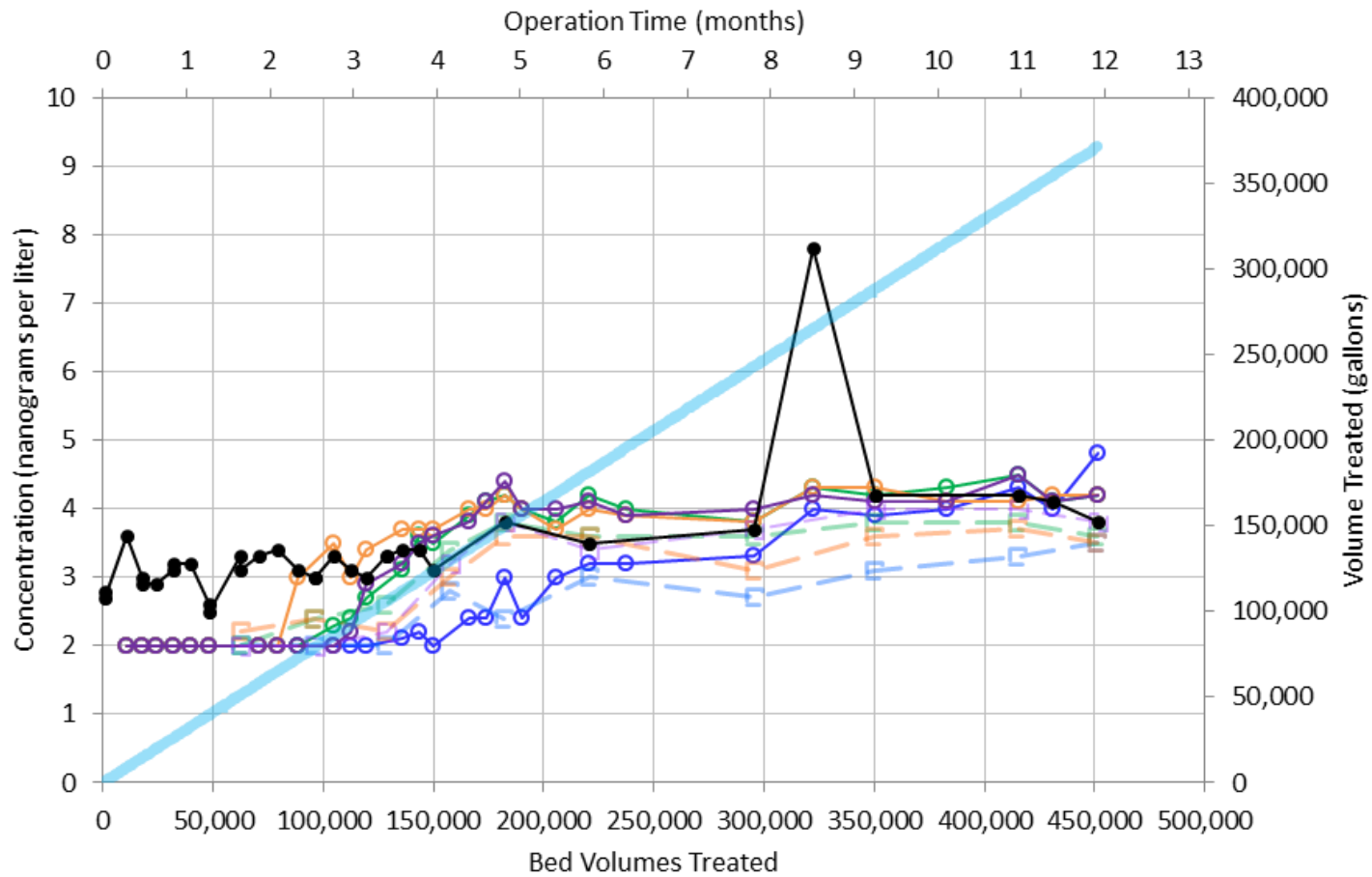
1. "M" on treatment samples indicates mid-point sample (at one half of column bed length).
2. F400 = Filtrasorb 400.
3. GAC = granular activated carbon.
4. LHHCWD = La Habra Heights County Water District.



GSI Job No.	5302	Drawn By:	GM
Issued:	6-Oct-21	Chk'd By:	MJ
Revised:		Apr'd By:	PEG
Scale:		Figure D5	

**PERFLUOROHEXANESULFONIC ACID (PFHxS)  
GAC BREAKTHROUGH CURVES**  
PFAS Treatment Pilot Study  
Water Replenishment District of Southern California

### LHHCWD Well #10 - Perfluorohexanoic acid (PFHxA) IX Samples



**Notes:**

1. "M" on treatment samples indicates mid-point sample (at one third of column bed length).
2. IX = ion exchange.
3. LHHCWD = La Habra Heights County Water District.

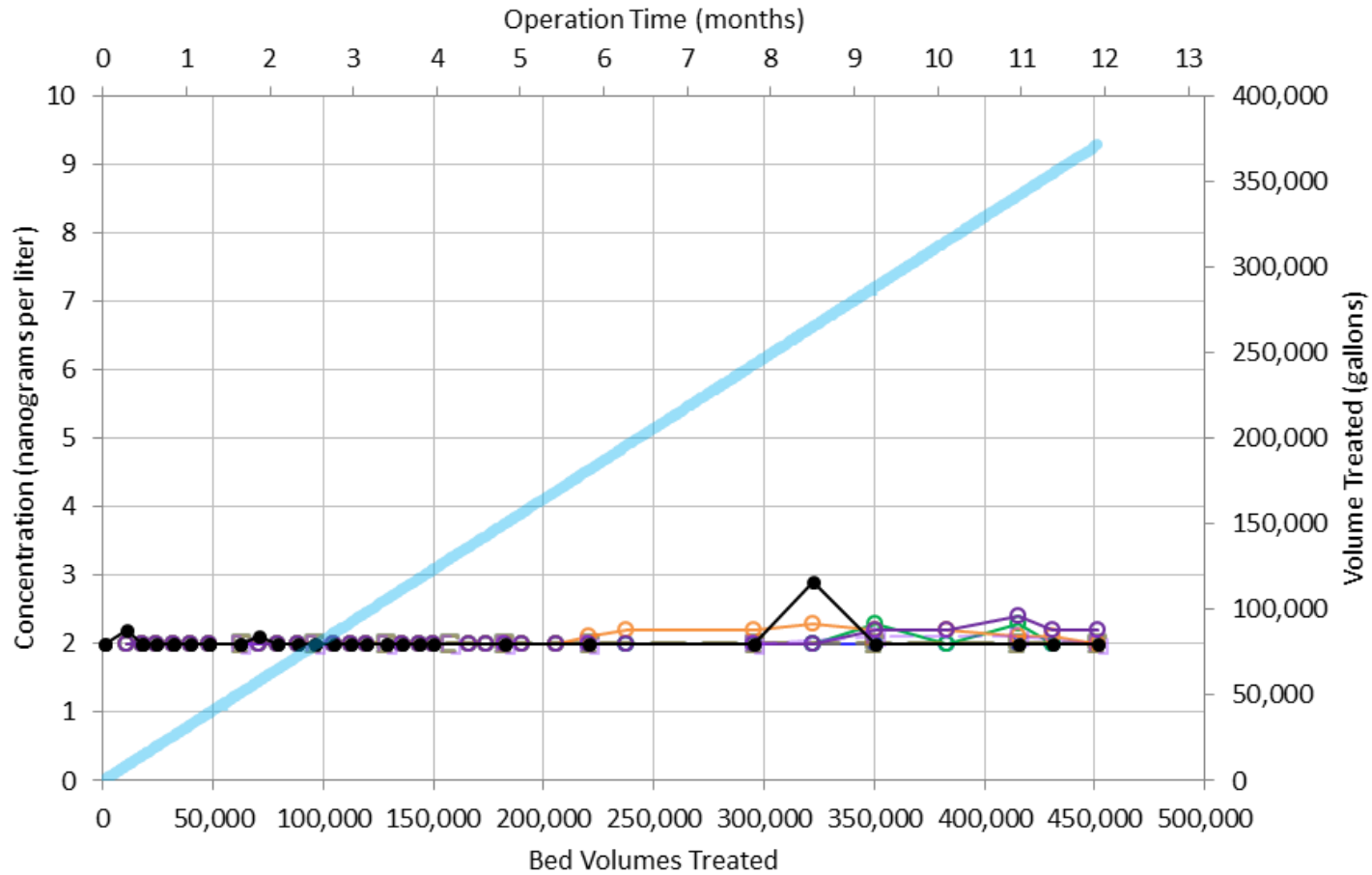
- PSR2 Plus
- PSR2 Plus M
- SIR-110-HP
- SIR-110-HP M
- PFA694E
- PFA694E M
- PFCR-2
- PFCR-2 M
- Influent
- Water Volume Treated



GSI Job No. 5302	Drawn By: GM
Issued: 6-Oct-21	Chk'd By: MJ
Revised:	Aprv'd By: PEG
Scale:	Figure D6

**PERFLUOROHEXANOIC ACID (PFHxA)  
IX BREAKTHROUGH CURVES**  
PFAS Treatment Pilot Study  
Water Replenishment District of Southern California

## LHHCWD Well #10 - Perfluoroheptanoic acid (PFHpA) IX Samples



**Notes:**

1. "M" on treatment samples indicates mid-point sample (at one third of column bed length).
2. IX = ion exchange.
3. LHHCWD = La Habra Heights County Water District.

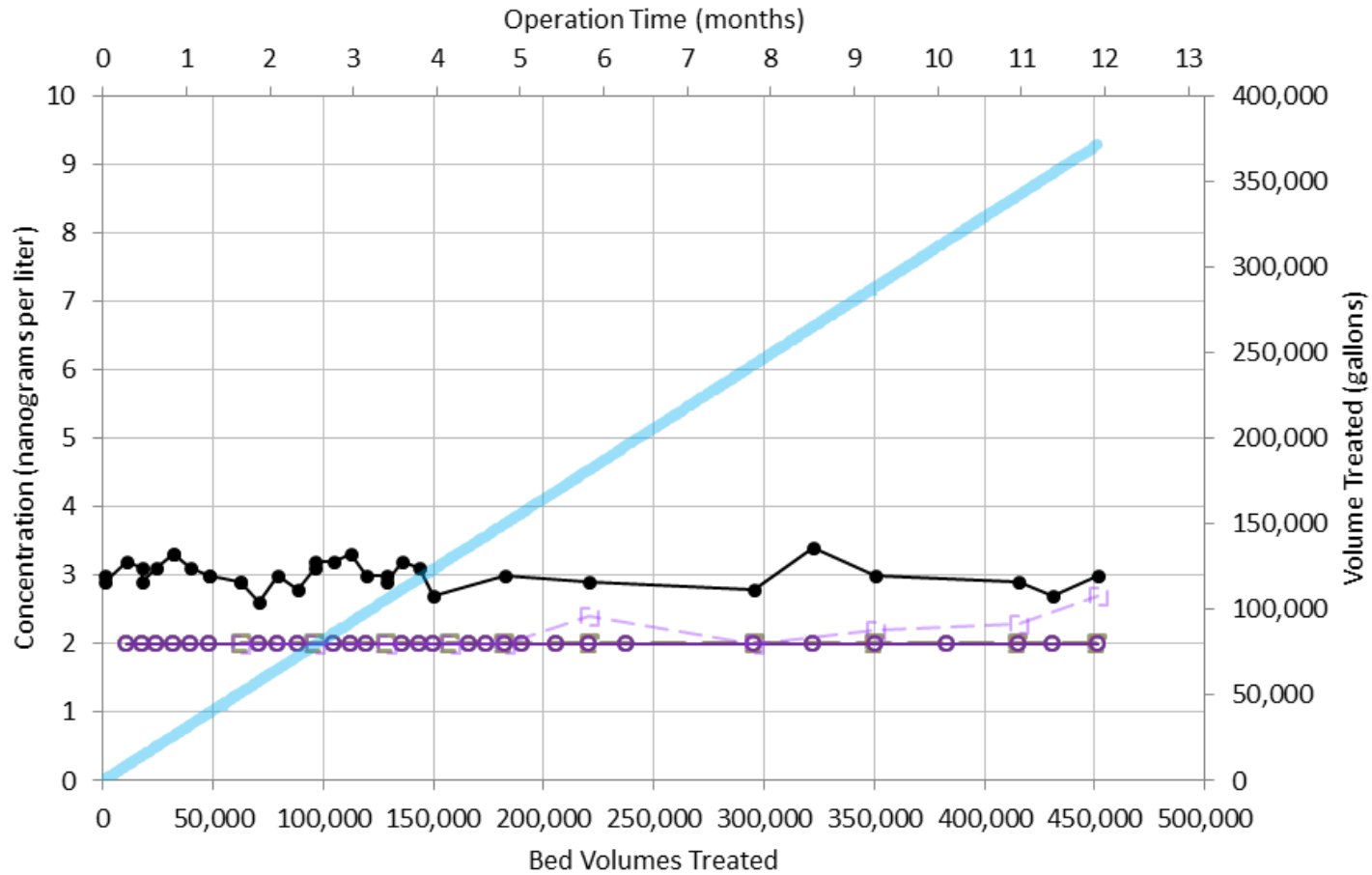
- PSR2 Plus
- PSR2 Plus M
- SIR-110-HP
- SIR-110-HP M
- PFA694E
- PFA694E M
- PFCR-2
- PFCR-2 M
- Influent
- Water Volume Treated



GSI Job No. 5302	Drawn By: GM
Issued: 6-Oct-21	Chk'd By: MJ
Revised:	Apr'd By: PEG
Scale:	Figure D7

**PERFLUOROHEPTANOIC ACID (PFHpA)  
IX BREAKTHROUGH CURVES**  
PFAS Treatment Pilot Study  
Water Replenishment District of Southern California

## LHHCWD Well #10 - Perfluorononanoic acid (PFNA) IX Samples



**Notes:**

1. "M" on treatment samples indicates mid-point sample (at one third of column bed length).
2. IX = ion exchange.
3. LHHCWD = La Habra Heights County Water District.

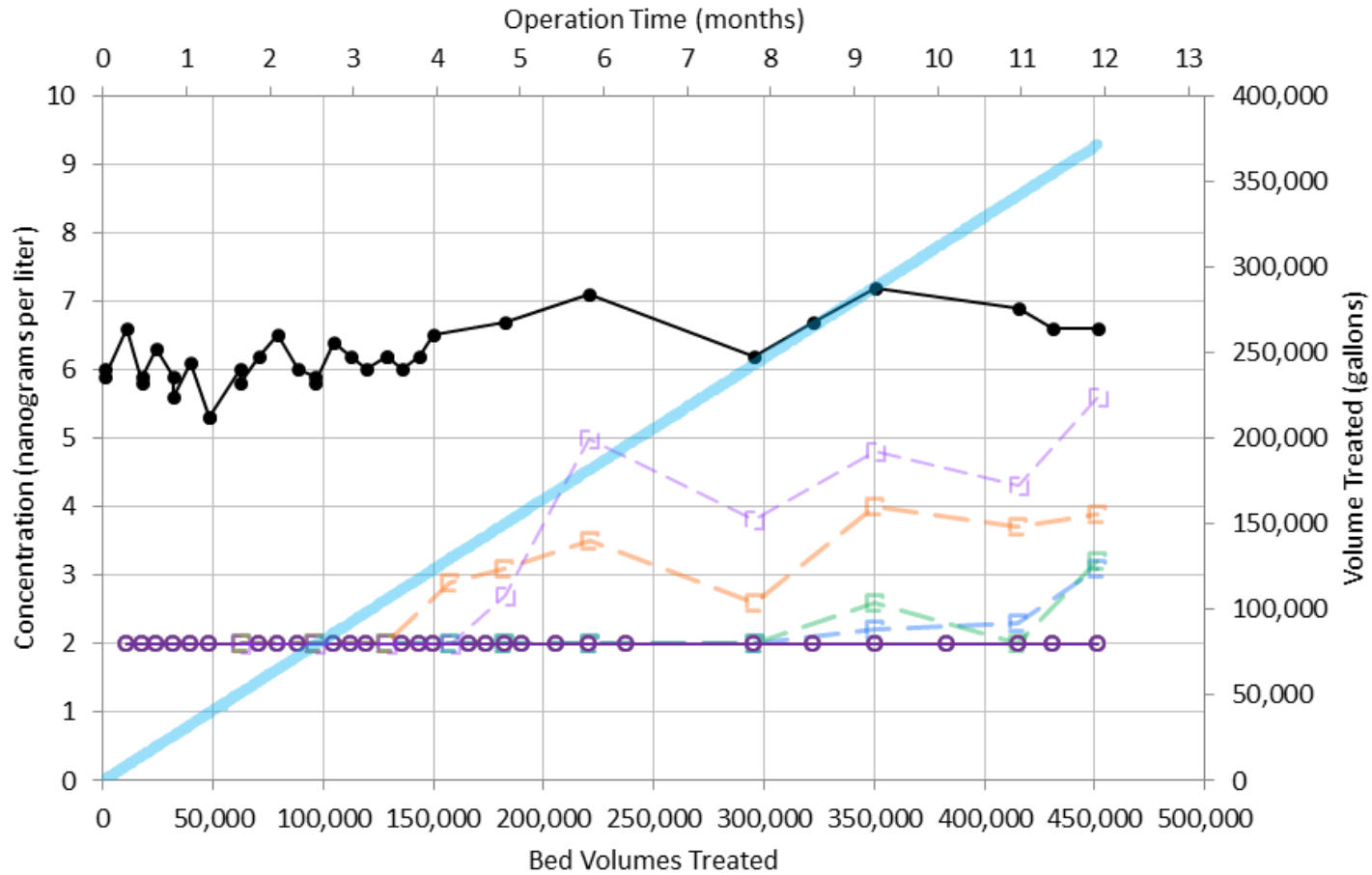
- PSR2 Plus
- SIR-110-HP
- PFA694E
- PFCR-2
- Influent
- PSR2 Plus M
- SIR-110-HP M
- PFA694E M
- PFCR-2 M
- Water Volume Treated



GSI Job No.	5302	Drawn By:	GM
Issued:	6-Oct-21	Chk'd By:	MJ
Revised:		Apr'd By:	PEG
Scale:		Figure D8	

**PERFLUORONONANOIC ACID (PFNA)  
IX BREAKTHROUGH CURVES**  
PFAS Treatment Pilot Study  
Water Replenishment District of Southern California

## LHHCWD Well #10 - Perfluorobutanesulfonic acid (PFBS) IX Samples



**Notes:**

1. "M" on treatment samples indicates mid-point sample (at one third of column bed length).
2. IX = ion exchange.
3. LHHCWD = La Habra Heights County Water District.

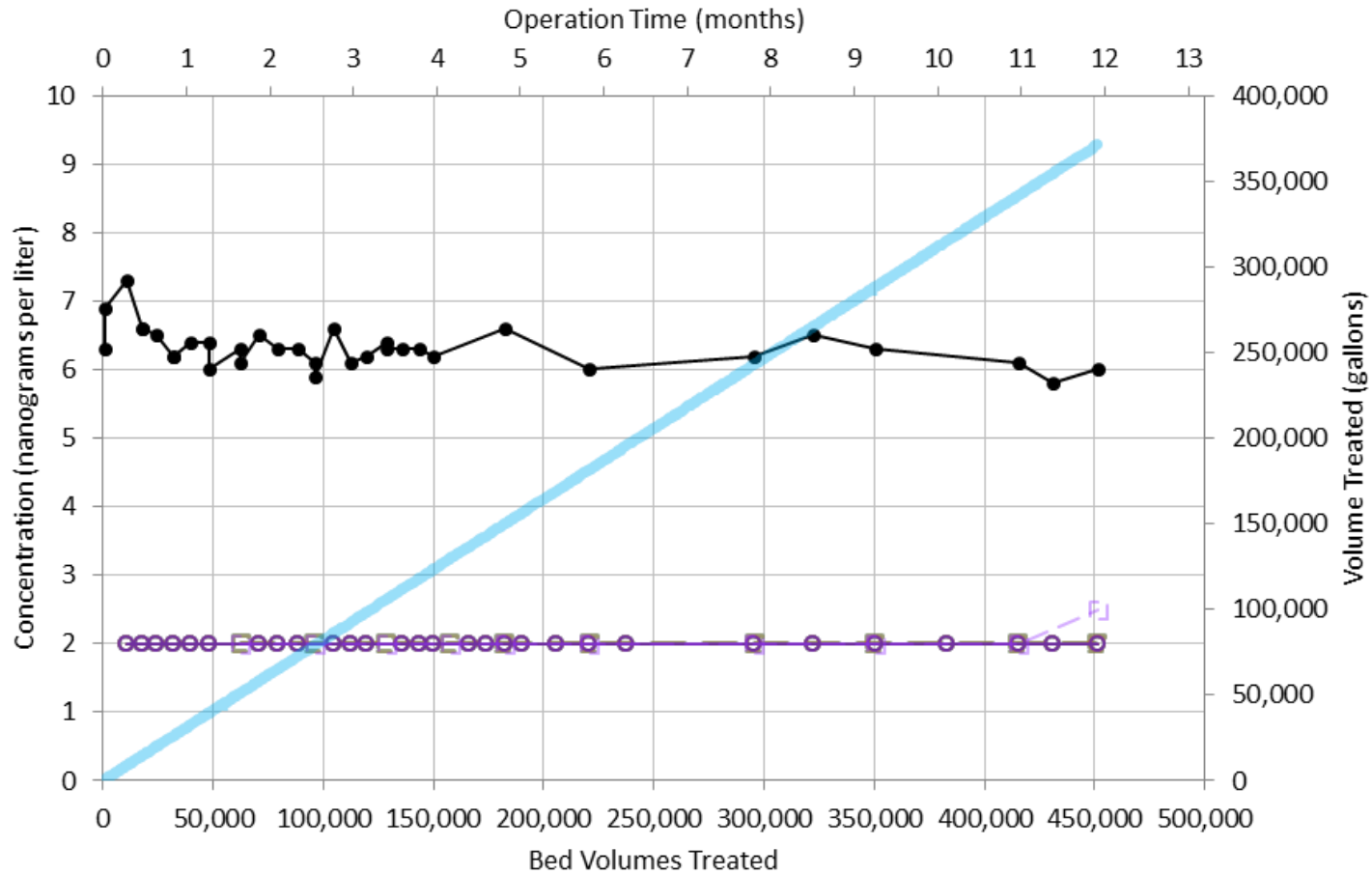
- PSR2 Plus
- PSR2 Plus M
- SIR-110-HP
- SIR-110-HP M
- PFA694E
- PFA694E M
- PFCR-2
- PFCR-2 M
- Influent
- Water Volume Treated



GSI Job No. 5302	Drawn By: GM
Issued: 6-Oct-21	Chk'd By: MJ
Revised:	Apr'd By: PEG
Scale:	Figure D9

**PERFLUOROBUTANESULFONIC ACID (PFBS)  
IX BREAKTHROUGH CURVES**  
PFAS Treatment Pilot Study  
Water Replenishment District of Southern California

## LHCWD Well #10 - Perfluorohexanesulfonic acid (PFHxS) IX Samples



**Notes:**

1. "M" on treatment samples indicates mid-point sample (at one third of column bed length).
2. IX = ion exchange.
3. LHCWD = La Habra Heights County Water District.

- PSR2 Plus
- PSR2 Plus M
- SIR-110-HP
- SIR-110-HP M
- PFA694E
- PFA694E M
- PFCR-2
- PFCR-2 M
- Influent
- Water Volume Treated



GSI Job No. 5302	Drawn By: GM
Issued: 6-Oct-21	Chk'd By: MJ
Revised:	Apr'd By: PEG
Scale:	Figure D10

**PERFLUOROHEXANESULFONIC ACID (PFHxS)  
IX BREAKTHROUGH CURVES**  
PFAS Treatment Pilot Study  
Water Replenishment District of Southern California

**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED  
CARBON TO TREAT GROUNDWATER IMPACTED WITH  
PER- AND POLYFLUOROALKYL SUBSTANCES  
LA HABRA HEIGHTS COUNTY WATER DISTRICT – WATER SUPPLY WELL #10**

**Appendix E**

*Data Usability Summary*

## APPENDIX E

### DATA USABILITY SUMMARY

La Habra Heights County Water District Well #10 (Intersection of Saragosa Street and Norwalk Boulevard, Whittier, California)  
Montebello Land & Water Company Well #7 (344 East Madison Avenue Montebello, California)

GSI Environmental Inc. (GSI) reviewed the field methods and analytical laboratory reports for water samples collected at Montebello Land & Water Company Well #7 located 344 East Madison Avenue Montebello, California (Site #1) and La Habra Heights County Water District Well #10 located at the intersection of Saragosa Street and Norwalk Boulevard, Whittier, California (Site #2). Many of the water sampling events were conducted during the same mobilizations and some laboratory reports reflect combined data for both the La Habra Heights Well #10 site and the Montebello Well #7 site; therefore, this Data Usability Summary reflects the review and validation of data from both of the well sites. The data were collected to evaluate the following:

- The efficiency and effectiveness of four different types of Granular Activated Carbon (GAC) and four different types of Ion Exchange (IX) resin for per- and polyfluoroalkyl substances (PFAS) removal.
- The PFAS breakthrough through these media as well as the ability to remove PFAS compounds to below the RLs.

The laboratory reports were reviewed to evaluate data usability of the analytical results in accordance with the following guidance documents:

- USEPA, 2018, Data Review and Validation Guidelines for Perfluoroalkyl Substances (PFASs) Analyzed Using EPA Method 537 (EPA 910-R-18-001).
- United States Environmental Protection Agency (USEPA), 2017, National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA 540-R-2017-001); and
- USEPA, 2017, National Functional Guidelines for Organic Data Review (EPA 540-R-014-002).

Project samples were analyzed by the following analytical laboratory:

- Eurofins Eaton Analytical of Monrovia, California (Eurofins)

At the time the laboratory data were generated for this project, the laboratory was accredited by the National Environmental Laboratory Accreditation Program (NELAP) and California Environmental Laboratory Accreditation Program (CA ELAP) for the matrices and methods of analysis.

### SUMMARY OF DATA EVALUATED

GSI reviewed 710 water samples reported in the following 41 Eurofins laboratory reports which are included in **Appendix C**:

- |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| • 866700 | • 875389 | • 884399 | • 893261 | • 904643 | • 925810 |
| • 869296 | • 876642 | • 885690 | • 894497 | • 904644 | • 931039 |
| • 869571 | • 877883 | • 887122 | • 895705 | • 906889 | • 936465 |
| • 870644 | • 878992 | • 888431 | • 897233 | • 909215 | • 938766 |
| • 871876 | • 879945 | • 889747 | • 898631 | • 911833 | • 938769 |
| • 872940 | • 881682 | • 890914 | • 899759 | • 915470 | • 941985 |
| • 874079 | • 883523 | • 891987 | • 902203 | • 920474 |          |



Project samples were analyzed for the following analyses and compounds.

- The following PFAs compounds using EPA method 537.1:
  - 11-chloroeicosafluoro-3-oxaundecane-sulfonic acid
  - 4,8-dioxa-3H-perfluorononanoic acid (ADONA)
  - 9-chlorohexadecafluoro-3-oxanone-sulfonic acid
  - Hexafluoropropylene oxide dimer acid (HFPO-DA)
  - N-ethyl Perfluorooctanesulfonamidoacetic acid
  - N-methyl Perfluorooctanesulfonamidoacetic acid
  - Perfluorobutanesulfonic acid (PFBS)
  - Perfluorodecanoic acid (PFDA)
  - Perfluorododecanoic acid (PFDoA)
  - Perfluoroheptanoic acid (PFHpA)
  - Perfluorohexanesulfonic acid (PFHxS)
  - Perfluorohexanoic acid (PFHxA)
  - Perfluorononanoic acid (PFNA)
  - Perfluorooctanesulfonic acid (PFOS)
  - Perfluorooctanoic acid (PFOA)
  - Perfluorotetradecanoic acid (PFTA)
  - Perfluorotridecanoic acid (PFTTrDA)
  - Perfluoroundecanoic acid (PFUnA)
- VOCs using EPA method 524.2
- Total Suspended Solids (TSS) using method SM2540D
- Total Dissolved Solids (TDS) using method E160.1/SM2540C
- Oil and Grease using method EPA method 1664A
- Sodium, potassium, magnesium, and iron using method EPA method 200.7
- Arsenic, manganese, and uranium using method EPA method 200.8
- Hexavalent chromium using method EPA method 218.6
- Nitrite as nitrogen, nitrate as nitrogen, chloride, sulfate using method EPA method 300.0
- Perchlorate using method EPA method 314.0
- Total and dissolved organic carbon using method SM5310C
- Alkalinity in CaCO<sub>3</sub> using method SM2340B
- Total Hardness using method SM2340B

**Table E-1** lists the sample identification numbers included in this review, cross-referenced to laboratory identifications.

## DATA REVIEW

The data quality review included an evaluation of the following quality assurance/quality control (QA/QC) criteria:

- Preservation and Holding Times
- Blank Sample Analysis
- Internal Standard and Surrogate Recoveries
- Laboratory Control Samples

- Replicate Samples

For replicate samples, the relative percent difference (RPD) was used to evaluate the data. RPD was calculated using the following formula:

$$RPD = \frac{|x_1 - x_2|}{\bar{x}} \times 100$$

Where:

- $x_1$  = analyte concentration in primary sample
- $x_2$  = analyte concentration in duplicate sample
- $\bar{x}$  = average of  $x_1$  and  $x_2$

### Definition of Data Qualifiers

The following qualifiers were applied to a limited percentage of sample analytical data, as described in the following sections:

Qualifier	Definition
J	The result is an estimated concentration. The associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

### Preservation and Holding Time

Samples were evaluated for agreement with the chain-of-custody by the laboratory upon receipt as well as the following:

- All samples were received by the laboratory in good condition and were in the appropriate containers with preservatives.
- All chain of custody paperwork was completed properly.
- The temperature inside the coolers for samples were within the acceptable criteria of 0 to 6°C upon receipt by the laboratory, except for the samples delivered to the laboratory within 24 hours which had receipt temperatures higher than 6°C. No qualifications were applied.

Samples were all analyzed within holding times except the following:

- Eurofins Lab Report 925810: alkalinity as CaCO<sub>3</sub> and TSS for LH-INF-20210325 and MB-INF-20210325 were analyzed outside of holding time.
  - The holding time for alkalinity as CaCO<sub>3</sub> using method SM2320B is 14 days. Samples LH-INF-20210325 and MB-INF-20210325 were collected on March 25, 2021 and Eurofins analyzed the sample on April 13 and April 14, 2021 (19 and 20 days later), respectively for alkalinity in CaCO<sub>3</sub>. Alkalinity as CaCO<sub>3</sub> results for both LH-INF-20210325 and MB-INF-20210325 were flagged with J-qualifiers.
  - The holding time for TSS is seven days. Samples LH-INF-20210325 and MB-INF-20210325 were collected on March 25, 2021 and Eurofins analyzed the sample on April 2, 2021 for TSS (8 days later). TSS results for both LH-INF-20210325 and MB-INF-20210325 were flagged with UJ-qualifiers.

## Method Blanks

No analytes were detected in laboratory method blank samples except for the following:

- Eurofins Lab Report 925810: arsenic was detected in the method blank for analytical batch 1316698 associated with samples LH-INF-20210325 and MB-INF-20210325. Results for arsenic for both samples were flagged with J-qualifiers.

## Internal Standard and Surrogate Recoveries

Internal standard and surrogate recoveries were within project quality objectives except for the following analyses for PFAS compounds using EPA method 537.1:

Eurofins Lab Report 870644:

- Surrogate recoveries for two surrogates were high and outside laboratory criteria for sample GAC-5-20200512. Results may be biased high. Since the associated PFAS compounds were ND in the sample, no flags were applied.

Eurofins Lab Report 871876:

- Surrogate recoveries for two surrogates were high and outside laboratory criteria for sample GAC-1-20200519. Results may be biased high. Since the associated PFAS compounds were ND in the sample, no flags were applied.
- Surrogate recoveries for four surrogates were low and outside laboratory criteria for sample MB-INF-20200519. The associated PFAS compounds were ND. Since the sample results may be biased low, the UJ qualifier was applied. Compounds are listed in the table below.

Sample ID	Analyte Qualified with UJ
MB-INF-20200519	Hexafluoropropylene oxide dimer acid (HFPO-DA)
	N-ethyl Perfluorooctanesulfonamidoacetic acid
	Perfluorodecanoic acid (PFDA)
	Perfluorohexanoic acid (PFHxA)

## Laboratory Control Samples

Laboratory control sample (LCS) and laboratory control sample duplicates (LCSD) recoveries and/or associated RPDs were within laboratory acceptance limits except for the following:

- Eurofins Lab Report 870644: LCS recoveries for PFTA using EPA method 537.1. The recovery exceeded laboratory criteria. However, based on the LCSD and RPD results, no data qualifiers were applied.
- Eurofins Lab Report 884399: LCS recoveries for 1,2,3-trichlorobenzene, 2,2-dichloropropane, naphthalene, and tert-amyl methyl ether using EPA method 524.2. LCS recoveries were high in each exceedance compared to laboratory limits; since these

analytes were ND in samples MB-INF-20200730 and LH-INF-20200730, no qualifiers were applied.

- Eurofins Lab Report 884399: RPD recoveries for 1,2,3-trichlorobenzene and naphthalene using EPA method 524.2. RPDs for these compounds exceeded laboratory criteria; however, since the corresponding sample results that were potentially biased high (based on LCS recovery) also were ND, no flags were applied for the RPD exceedance.
- Eurofins Lab Report 893261: LCS recoveries for bromochloromethane and chloroform using EPA method 524.2. Recoveries were high in each exceedance compared to laboratory limits; since these analytes were ND in samples MB-INF-20200917 and LH-INF-20200917, no qualifiers were applied.
- Eurofins Lab Report 893261: RPD recoveries for 1,1,1-trichloroethane and chloroform using EPA method 524.2. RPDs for these compounds exceeded laboratory criteria; however, since these analytes were ND in the corresponding samples, no flags were applied.
- Eurofins Lab Report 909215: RPD recovery for tert-butyl ethyl ether using EPA method 524.2. Recovery exceeded laboratory criteria. However, the LCS and LCSD were within recovery limits; no flag was applied.
- Eurofins Lab Report 941985: LCS recovery for 1,3-dichlorobenzene EPA method 524.2. Recovery exceeded laboratory criteria. No LCSD was analyzed. However, based on the sample result being ND, no flag was applied.

### **Matrix Spike and Matrix Spike Duplicates**

The percent recoveries for the matrix spike (MS), matrix spike duplicates (MSD), and RPDs for project samples were all within laboratory and method acceptance limits.

### **FIELD SAMPLING PROCEDURES**

The following field and laboratory data were reviewed:

- Field notes with respect to field instrumentation calibration, sampling procedures, and preservation procedures prior to delivering the samples to the laboratory.
- Reportable data and laboratory report case narratives.

Section 3 of the report contains further details of sample collection procedures.

### **Field Precision**

Field precision of system influent analysis was evaluated by comparing the RPD between results of field samples and field replicate samples. Eleven field replicate samples were collected from the following influent samples:

- MB-INF-20200424
- LH-INF-20200424
- LH-INF 20200512

- LH-INF-20200526
- LH-INF-20200609
- LH-INF-20200630
- MB-INF-20200724
- LH-INF-20200730
- MB-INF-20200813
- LH-INF-20200827
- MB-INF-20200917

Relative percent differences and absolute differences calculated for the primary and replicate samples were within data quality objectives, so no data qualifiers were applied. Field replicate precision calculations for all detected compounds in the sample pair are summarized in **Table E-2**.

### **SUMMARY**

The analytical data were determined to be usable for the purposes of this pilot study. The data usability process resulted in qualification of 0.052% of the concentrations within the dataset. Qualified analytical data are presented in **Table E-3** with the associated data qualifiers. Qualifiers have been incorporated into the summary data tables that are provided following the report text.

**Table E-1: Field and Lab Sample ID**  
**PFAS Treatment Pilot Study**  
 Water Replenishment District of Southern California

Field Sample ID	Lab Sample ID	Collection Date	Lab Report
MB-INF-20200424	202004200247	4/24/2020	866700
MB-INF-DUP-20200424	202004200249		
LH-INF-20200424	202004200254		
LH-INF-DUP-20200424	202004200255		
FB-1-HOLD-20200424	202004200260		
GAC-1-20200505	202005050712	5/5/2020	869296
GAC-2-20200505	202005050713		
GAC-3-20200505	202005050714		
GAC-4-20200505	202005050715		
IX-1-20200505	202005050716		
IX-2-20200505	202005050717		
IX-3-20200505	202005050718		
IX-4-20200505	202005050719		
LH-INF-20200505	202005050720		
GAC-5-20200505	202005050721		
GAC-6-20200505	202005050722		
GAC-7-20200505	202005050723		
GAC-8-20200505	202005050724		
IX-5-20200505	202005050725		
IX-6-20200505	202005050726		
IX-7-20200505	202005050727		
IX-8-20200505	202005050728		
MB-INF--20200505	202005050729		
MB-INF-DUP-20200505	202005050730		
FB-HOLD-20200505	202005050731		
GAC-5-20200506	202005060507	5/6/2020	869571
GAC-6-20200506	202005060508		
GAC-7-20200506	202005060509		
GAC-8-20200506	202005060510		
IX-5-20200506	202005060511		
IX-6-20200506	202005060512		
IX-7-20200506	202005060513		
IX-8-20200506	202005060514		
MB-INF-20200506	202005060515		
GAC-1-20200512	202005120500	5/12/2020	870644
GAC-2-20200512	202005120501		
GAC-3-20200512	202005120502		
GAC-4-20200512	202005120503		
IX-1-20200512	202005120504		
IX-2-20200512	202005120505		
IX-3-20200512	202005120506		
IX-4-20200512	202005120507		
LH-INF 20200512	202005120508		
LH-INF-DUP-20200512	202005120509		
GAC-5-20200512	202005120510		
GAC-6-20200512	202005120511		
GAC-7-20200512	202005120512		
GAC-8-20200512	202005120513		
IX-5-20200512	202005120514		

**Table E-1: Field and Lab Sample ID**  
**PFAS Treatment Pilot Study**  
 Water Replenishment District of Southern California

Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-6-20200512	202005120515	5/12/2020	870644
IX-7-20200512	202005120516		
IX-8-20200512	202005120517		
MB-INF-20200512	202005120518		
FB-20200512	202005120519		
GAC-1-20200519	202005190374	5/19/2020	871876
GAC-2-20200519	202005190375		
GAC-3-20200519	202005190376		
GAC-4-20200519	202005190377		
IX-1-20200519	202005190378		
IX-2-20200519	202005190379		
IX-3-20200519	202005190380		
IX-4-20200519	202005190381		
LH-INF-20200519	202005190382		
GAC-5-20200519	202005190383		
GAC-6-20200519	202005190384		
GAC-7-20200519	202005190385		
GAC-8-20200519	202005190386		
IX-5-20200519	202005190387		
IX-6-20200519	202005190388		
IX-7-20200519	202005190389		
IX-8-20200519	202005190390		
MB-INF-20200519	202005190391		
FB-20200519	202005190392		
GAC-1-20200526	202005260418		
GAC-2-20200526	202005260431		
GAC-3-20200526	202005260432		
GAC-4-20200526	202005260433		
IX-1-20200526	202005260434		
IX-2-20200526	202005260435		
IX-3-20200526	202005260436		
IX-4-20200526	202005260437		
LH-INF-20200526	202005260438		
LH-INF-DUP-20200526	202005260439		
GAC-5-20200526	202005260440		
GAC-6-20200526	202005260441		
GAC-7-20200526	202005260442		
GAC-8-20200526	202005260443		
IX-5-20200526	202005260444		
IX-6-20200526	202005260445		
IX-7-20200526	202005260446		
IX-8-20200526	202005260447		
MB-INF-20200526	202005260448		
Field Blank - Hold	202005260460		
GAC-1-20200602	202006020423	6/2/2020	874079
GAC-2-20200602	202006020424		
GAC-3-20200602	202006020425		
GAC-4-20200602	202006020426		
IX-1-20200602	202006020427		

**Table E-1: Field and Lab Sample ID**  
**PFAS Treatment Pilot Study**  
 Water Replenishment District of Southern California

Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-2-20200602	202006020428	6/2/2020	874079
IX-3-20200602	202006020429		
IX-4-20200602	202006020430		
LH-INF-20200602	202006020431		
GAC-5-20200602	202006020432		
GAC-6-20200602	202006020433		
GAC-7-20200602	202006020434		
GAC-8-20200602	202006020435		
IX-5-20200602	202006020436		
IX-6-20200602	202006020437		
IX-7-20200602	202006020438		
IX-8-20200602	202006020439		
MB-INF-20200602	202006020440		
FB-20200602	202006020441		
GAC-1-20200609	202006090542	6/9/2020	875389
GAC-2-20200609	202006090558		
GAC-3-20200609	202006090559		
GAC-4-20200609	202006090560		
IX-1-20200609	202006090561		
IX-2-20200609	202006090562		
IX-3-20200609	202006090563		
IX-4-20200609	202006090564		
LH-INF-20200609	202006090565		
LH-INF-DUP-20200609	202006090566		
GAC-5-20200609	202006090567		
GAC-6-20200609	202006090568		
GAC-7-20200609	202006090569		
GAC-8-20200609	202006090570		
IX-5-20200609	202006090571		
IX-6-20200609	202006090572		
IX-7-20200609	202006090573		
IX-8-20200609	202006090574		
MB-INF-20200609	202006090575		
FB-20200609	202006090576		
GAC-5-20200616	202006160319	6/16/2020	876642
GAC-6-20200616	202006160320		
GAC-7-20200616	202006160322		
GAC-8-20200616	202006160323		
IX-5-20200616	202006160324		
IX-6-20200616	202006160325		
IX-7-20200616	202006160326		
IX-8-20200616	202006160327		
MB-INF-20200616	202006160329		
FB-HOLD	202006160330		
GAC-5-20200623	202006230605	6/23/2020	877883
GAC-6-20200623	202006230606		
GAC-7-20200623	202006230607		
GAC-8-20200623	202006230608		
IX-5-20200623	202006230609		



**Table E-1: Field and Lab Sample ID  
 PFAS Treatment Pilot Study  
 Water Replenishment District of Southern California**

Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-6-20200623	202006230610	6/23/2020	877883
IX-7-20200623	202006230611		
IX-8-20200623	202006230612		
MB-INF-20200623	202006230613		
GAC-1M-20200630	202006300488	6/30/2020	878992
GAC-2M-20200630	202006300489		
GAC-3M-20200630	202006300490		
GAC-4M-20200630	202006300491		
IX-1M-20200630	202006300492		
IX-2M-20200630	202006300493		
IX-3M-20200630	202006300494		
IX-4M-20200630	202006300495		
LH-INF-20200630	202006300497		
LH-INF-DUP-20200630	202006300498		
GAC-5M-20200630	202006300499		
GAC-6M-20200630	202006300500		
GAC-7M-20200630	202006300501		
GAC-8M-20200630	202006300502		
IX-5M-20200630	202006300503		
IX-6M-20200630	202006300504		
IX-7M-20200630	202006300505		
IX-8M-20200630	202006300506		
MB-INF-20200630	202006300510		
FB - 20200630	202006300511		
GAC-1-20200707	202007070502	7/7/2020	879945
GAC-2-20200707	202007070503		
GAC-3-20200707	202007070504		
GAC-4-20200707	202007070505		
IX-1-20200707	202007070506		
IX-2-20200707	202007070507		
IX-3-20200707	202007070508		
IX-4-20200707	202007070509		
LH-INF-20200707	202007070511		
GAC-5-20200707	202007070512		
GAC-6-20200707	202007070513		
GAC-7-20200707	202007070514		
GAC-8-20200707	202007070515		
IX-5-20200707	202007070516		
IX-6-20200707	202007070517		
IX-7-20200707	202007070518		
IX-8-20200707	202007070519		
MB-INF-20200707	202007070520		
GAC-1-20200715	202007150536	7/15/2020	881682
GAC-2-20200715	202007150537		
GAC-3-20200715	202007150538		
GAC-4-20200715	202007150539		
IX-1-20200715	202007150540		
IX-2-20200715	202007150541		
IX-3-20200715	202007150542		

**Table E-1: Field and Lab Sample ID**  
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-4-20200715	202007150543	7/15/2020	881682
LH-INF-20200715	202007150544		
GAC-5-20200715	202007150545		
GAC-6-20200715	202007150546		
GAC-7-20200715	202007150547		
GAC-8-20200715	202007150548		
IX-5-20200715	202007150549		
IX-6-20200715	202007150550		
IX-7-20200715	202007150551		
IX-8-20200715	202007150552		
MB-INF-20200715	202007150554	7/24/2020	883523
GAC-1-20200724	202007240318		
GAC-2-20200724	202007240319		
GAC-3-20200724	202007240320		
GAC-4-20200724	202007240321		
IX-1-20200724	202007240322		
IX-2-20200724	202007240324		
IX-3-20200724	202007240325		
IX-4-20200724	202007240326		
LH-INF-20200724	202007240327		
GAC-5-20200724	202007240328		
GAC-6-20200724	202007240329		
GAC-7-20200724	202007240330		
GAC-8-20200724	202007240331		
IX-5-20200724	202007240332		
IX-6-20200724	202007240333		
IX-7-20200724	202007240334		
IX-8-20200724	202007240335		
MB-INF-20200724	202007240336		
MB-INF-DUP-20200724	202007240337		
FB-HOLD-20200724	202007240340	7/30/2020	884399
GAC-1M-20200730	202007300278		
GAC-2M-20200730	202007300279		
GAC-3M-20200730	202007300280		
GAC-4M-20200730	202007300281		
IX-1M-20200730	202007300282		
IX-2M-20200730	202007300283		
IX-3M-20200730	202007300284		
IX-4M-20200730	202007300285		
LH-INF-20200730	202007300286		
LH-INF-DUP-20200730	202007300287		
GAC-5M-20200730	202007300288		
GAC-6M-20200730	202007300289		
GAC-7M-20200730	202007300290		
GAC-8M-20200730	202007300291		
IX-5M-20200730	202007300292		
IX-6M-20200730	202007300293		
IX-7M-20200730	202007300294		
IX-8M-20200730	202007300295		

**Table E-1: Field and Lab Sample ID**  
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
MB-INF-20200730	202007300296	7/30/2020	884399
FB-20200730	202007300297		
LH-EFF-20200730	202007300298		
MB-EFF-20200730	202007300299		
GAC-1-20200806	202008060350	8/6/2020	885690
GAC-2-20200806	202008060351		
GAC-3-20200806	202008060352		
GAC-4-20200806	202008060353		
IX-1-20200806	202008060354		
IX-2-20200806	202008060355		
IX-3-20200806	202008060356		
IX-4-20200806	202008060357		
LH-INF-20200806	202008060359		
GAC-5-20200806	202008060360		
GAC-6-20200806	202008060361		
GAC-7-20200806	202008060362		
GAC-8-20200806	202008060363		
IX-5-20200806	202008060364		
IX-6-20200806	202008060365		
IX-7-20200806	202008060366		
IX-8-20200806	202008060367		
MB-INF-20200806	202008060368	8/13/2020	887122
FB-HOLD-20200806	202008060369		
GAC-1-20200813	202008130373		
GAC-2-20200813	202008130374		
GAC-3-20200813	202008130375		
GAC-4-20200813	202008130376		
IX-1-20200813	202008130377		
IX-2-20200813	202008130378		
IX-3-20200813	202008130379		
IX-4-20200813	202008130380		
LH-INF-20200813	202008130382		
GAC-5-20200813	202008130383		
GAC-6-20200813	202008130384		
GAC-7-20200813	202008130385		
GAC-8-20200813	202008130386		
IX-5-20200813	202008130387		
IX-6-20200813	202008130388		
IX-7-20200813	202008130389		
IX-8-20200813	202008130390	8/20/2020	888431
MB-INF-20200813	202008130391		
MB-INF-DUP-20200813	202008130392		
FB-HOLD-20200813	202008130393		
GAC-1-20200820	202008200210		
GAC-2-20200820	202008200211		
GAC-3-20200820	202008200212		
GAC-4-20200820	202008200213		
IX-1-20200820	202008200214		
IX-2-20200820	202008200215		

**Table E-1: Field and Lab Sample ID**  
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-3-20200820	202008200216	8/20/2020	888431
IX-4-20200820	202008200217		
LH-INF-20200820	202008200220		
GAC-5-20200820	202008200228		
GAC-6-20200820	202008200229		
GAC-7-20200820	202008200230		
GAC-8-20200820	202008200231		
IX-5-20200820	202008200232		
IX-6-20200820	202008200233		
IX-7-20200820	202008200234		
IX-8-20200820	202008200235		
MB-INF-20200820	202008200236		
FB-HOLD-20200820	202008200237		
GAC-1M-20200827	202008270372		
GAC-2M-20200827	202008270373		
GAC-3M-20200827	202008270374		
GAC-4M-20200827	202008270375		
IX-1M-20200827	202008270376		
IX-2M-20200827	202008270377		
IX-3M-20200827	202008270378		
IX-4M-20200827	202008270379		
LH-INF-20200827	202008270380		
LH-INF-DUP-20200827	202008270381		
GAC-5M-20200827	202008270382		
GAC-6M-20200827	202008270383		
GAC-7M-20200827	202008270384		
GAC-8M-20200827	202008270385		
IX-5M-20200827	202008270386		
IX-6M-20200827	202008270387		
IX-7M-20200827	202008270388		
IX-8M-20200827	202008270389		
MB-INF-20200827	202008270392		
FB-HOLD-20200827	202008270395		
GAC-1-20200903	202009030436	9/3/2020	890914
GAC-2-20200903	202009030437		
GAC-3-20200903	202009030438		
GAC-4-20200903	202009030439		
IX-1-20200903	202009030440		
IX-2-20200903	202009030441		
IX-3-20200903	202009030442		
IX-4-20200903	202009030443		
LH-INF-20200903	202009030444		
GAC-5-20200903	202009030445		
GAC-6-20200903	202009030446		
GAC-7-20200903	202009030447		
GAC-8-20200903	202009030448		
IX-5-20200903	202009030449		
IX-6-20200903	202009030450		
IX-7-20200903	202009030451		

**Table E-1: Field and Lab Sample ID**  
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report		
IX-8-20200903	202009030452	9/3/2020	890914		
MB-INF-20200903	202009030453				
MB-INF-20200903 MS	202009030454				
MB-INF-20200903 MSD	202009030455				
LH-INF-20200903 MS	202009030456				
LH-INF-20200903 MSD	202009030457				
GAC-1-20200910	202009100507	9/10/2020	891987		
GAC-2-20200910	202009100508				
GAC-3-20200910	202009100509				
GAC-4-20200910	202009100510				
IX-1-20200910	202009100511				
IX-2-20200910	202009100512				
IX-3-20200910	202009100513				
IX-4-20200910	202009100514				
LH-INF-20200910	202009100515				
GAC-5-20200910	202009100516				
GAC-6-20200910	202009100517				
GAC-7-20200910	202009100518				
GAC-8-20200910	202009100519				
IX-5-20200910	202009100520				
IX-6-20200910	202009100521				
IX-7-20200910	202009100522				
IX-8-20200910	202009100523				
MB-INF-20200910	202009100524				
GAC-1-20200917	202009170160			9/17/2020	893261
GAC-2-20200917	202009170161				
GAC-3-20200917	202009170162				
GAC-4-20200917	202009170163				
IX-1-20200917	202009170164				
IX-2-20200917	202009170165				
IX-3-20200917	202009170166				
IX-4-20200917	202009170167				
LH-INF-20200917	202009170169				
GAC-5-20200917	202009170171				
GAC-6-20200917	202009170172				
GAC-7-20200917	202009170173				
GAC-8-20200917	202009170174				
IX-5-20200917	202009170175				
IX-6-20200917	202009170176				
IX-7-20200917	202009170177				
IX-8-20200917	202009170178				
MB-INF-20200917	202009170179				
MB-INF-DUP-20200917	202009170180				
FB - 20200917 - HOLD	202009170181				
GAC-1M-20200924	202009240155	9/24/2020	894497		
GAC-2M-20200924	202009240156				
GAC-3M-20200924	202009240157				
GAC-4M-20200924	202009240158				
IX-1M-20200924	202009240159				

**Table E-1: Field and Lab Sample ID**  
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-2M-20200924	202009240160	9/24/2020	894497
IX-3M-20200924	202009240161		
IX-4M-20200924	202009240162		
GAC-5M-20200924	202009240163		
GAC-6M-20200924	202009240164		
GAC-7M-20200924	202009240165		
GAC-8M-20200924	202009240166		
IX-5M-20200924	202009240167		
IX-6M-20200924	202009240168		
IX-7M-20200924	202009240169		
IX-8M-20200924	202009240170		
GAC-1-20201001	202010010380	10/1/2020	895705
GAC-2-20201001	202010010381		
GAC-3-20201001	202010010382		
GAC-4-20201001	202010010383		
IX-1-20201001	202010010384		
IX-2-20201001	202010010385		
IX-3-20201001	202010010386		
IX-4-20201001	202010010387		
GAC-5-20201001	202010010388		
GAC-6-20201001	202010010389		
GAC-7-20201001	202010010390		
GAC-8-20201001	202010010391		
IX-5-20201001	202010010392		
IX-6-20201001	202010010393		
IX-7-20201001	202010010394		
IX-8-20201001	202010010395		
GAC-1-20201008	202010080580		
GAC-2-20201008	202010080581		
GAC-3-20201008	202010080582		
GAC-4-20201008	202010080583		
IX-1-20201008	202010080584		
IX-2-20201008	202010080585		
IX-3-20201008	202010080586		
IX-4-20201008	202010080587		
GAC-5-20201008	202010080588		
GAC-6-20201008	202010080589		
GAC-7-20201008	202010080590		
GAC-8-20201008	202010080591		
IX-5-20201008	202010080592		
IX-6-20201008	202010080593		
IX-7-20201008	202010080594		
IX-8-20201008	202010080595		
GAC-1-20201015	202010150620	10/15/2020	898631
GAC-2-20201015	202010150621		
GAC-3-20201015	202010150622		
GAC-4-20201015	202010150623		
IX-1-20201015	202010150624		
IX-2-20201015	202010150625		

**Table E-1: Field and Lab Sample ID**  
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-3-20201015	202010150626	10/15/2020	898631
IX-4-20201015	202010150627		
LH-INF-20201015	202010150628		
GAC-5-20201015	202010150629		
GAC-6-20201015	202010150630		
GAC-7-20201015	202010150631		
GAC-8-20201015	202010150632		
IX-5M-20201015	202010150633		
IX-6M-20201015	202010150634		
IX-7M-20201015	202010150635		
IX-8M-20201015	202010150636		
GAC-1M-20201015	202010150695		
GAC-2M-20201015	202010150696		
GAC-3M-20201015	202010150697		
GAC-4M-20201015	202010150698		
IX-1M-20201015	202010150699		
IX-2M-20201015	202010150700		
IX-3M-20201015	202010150701		
IX-4M-20201015	202010150702		
GAC-5M-20201015	202010150703		
GAC-6M-20201015	202010150704		
GAC-7M-20201015	202010150705		
GAC-8M-20201015	202010150706		
IX-5-20201015	202010150707		
IX-6-20201015	202010150708		
IX-7-20201015	202010150709		
IX-8-20201015	202010150710		
MB-INF-20201015	202010150711		
GAC-1-20201022	202010220303	10/22/2020	899759
GAC-2-20201022	202010220304		
GAC-3-20201022	202010220305		
GAC-4-20201022	202010220306		
IX-1-20201022	202010220307		
IX-2-20201022	202010220308		
IX-3-20201022	202010220309		
IX-4-20201022	202010220310		
GAC-5-20201022	202010220311		
GAC-6-20201022	202010220312		
GAC-7-20201022	202010220313		
GAC-8-20201022	202010220314		
IX-5-20201022	202010220315		
IX-6-20201022	202010220316		
IX-7-20201022	202010220317		
IX-8-20201022	202010220318		
GAC-1 - 20201105	202011050476	11/5/2020	902203
GAC-2 - 20201105	202011050477		
GAC-3 - 20201105	202011050478		
GAC-4 - 20201105	202011050479		
IX-1 - 20201105	202011050480		

**Table E-1: Field and Lab Sample ID**  
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-2 - 20201105	202011050481	11/5/2020	902203
IX-3 - 20201105	202011050482		
IX-4 - 20201105	202011050483		
GAC-5 - 20201105	202011050514		
GAC-6 - 20201105	202011050515		
GAC-7 - 20201105	202011050516		
GAC-8 - 20201105	202011050517		
IX-5 - 20201105	202011050518		
IX-6 - 20201105	202011050519		
IX-7 - 20201105	202011050520		
IX-8 - 20201105	202011050521		
GAC-1-20201119	202011190346		
GAC-2-20201119	202011190347		
GAC-3-20201119	202011190348		
GAC-4-20201119	202011190349		
IX-1-20201119	202011190350		
IX-2-20201119	202011190351		
IX-3-20201119	202011190352		
IX-4-20201119	202011190353		
GAC-1M-20201119	202011190355		
GAC-2M-20201119	202011190356		
GAC-3M-20201119	202011190357		
GAC-4M-20201119	202011190358		
IX-1M-20201119	202011190359		
IX-2M-20201119	202011190360		
IX-3M--20201119	202011190361		
IX-4M-20201119	202011190362		
IX-5-20201119	202011190364		
IX-6-20201119	202011190365		
IX-7-20201119	202011190366		
IX-8-20201119	202011190367		
GAC-5--20201119	202011190368		
GAC-6--20201119	202011190369		
GAC-7-20201119	202011190370		
GAC-8-20201119	202011190371		
IX-5M-20201119	202011190372		
IX-6M-20201119	202011190373		
IX-7M-20201119	202011190374		
IX-8M-20201119	202011190375		
GAC-5M-20201119	202011190376		
GAC-6M-20201119	202011190377		
GAC-7M-20201119	202011190378		
GAC-8M-20201119	202011190379		
LH-INF-20201119	202011190339		
MB-INF-20201119	202011190340		
GAC-1-20201204	202012040189	12/4/2020	906889
GAC-2-20201204	202012040190		
GAC-3-20201204	202012040191		
GAC-4-20201204	202012040192		



**Table E-1: Field and Lab Sample ID**  
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-1-20201204	202012040193	12/4/2020	906889
IX-2-20201204	202012040194		
IX-3-20201204	202012040195		
IX-4-20201204	202012040196		
GAC-5-20201204	202012040197		
GAC-6-20201204	202012040198		
GAC-7-20201204	202012040201		
GAC-8-20201204	202012040202		
IX-5-20201204	202012040203	12/17/2020	909215
IX-6-20201204	202012040204		
IX-7-20201204	202012040205		
IX-8-20201204	202012040206		
IX-5-20201217	202012170402		
IX-6-20201217	202012170403		
IX-7-20201217	202012170404		
IX-8-20201217	202012170405		
GAC-5-20201217	202012170406		
GAC-6-20201217	202012170407		
GAC-7-20201217	202012170408		
GAC-8-20201217	202012170409		
IX-5M-20201217	202012170410		
IX-6M-20201217	202012170411		
IX-7M-20201217	202012170412		
IX-8M-20201217	202012170413		
GAC-5M-20201217	202012170414		
GAC-6M-20201217	202012170415		
GAC-7M-20201217	202012170416		
GAC-8M-20201217	202012170417		
MB-INF-20201217	202012170418	1/7/2021	911833
GAC-5-20210107	202101070382		
GAC-6-20210107	202101070383		
GAC-7-20210107	202101070384		
GAC-8-20210107	202101070385		
IX-5-20210107	202101070386		
IX-7-20210107	202101070388		
IX-8-20210107	202101070389		
MB-INF-20210107	202101070390	1/27/2021	915470
GAC-1-20210127	202101270689		
GAC-2-20210127	202101270690		
GAC-3-20210127	202101270691		
GAC-4-20210127	202101270692		
IX-1-20210127	202101270694		
IX-2-20210127	202101270695		
IX-3-20210127	202101270696		
IX-4-20210127	202101270697		
GAC-1M-20210127	202101270698		
GAC-2M-20210127	202101270699		
GAC-3M-20210127	202101270700		
GAC-4M-20210127	202101270701		

**Table E-1: Field and Lab Sample ID**  
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-1M-20210127	202101270702	1/27/2021	915470
IX-2M-20210127	202101270703		
IX-3M-20210127	202101270704		
IX-4M-20210127	202101270705		
IX-5-20210127	202101270711		
IX-6-20210127	202101270712		
IX-7-20210127	202101270713		
IX-8-20210127	202101270714		
GAC-5-20210127	202101270715		
GAC-6-20210127	202101270716		
GAC-7-20210127	202101270717		
GAC-8-20210127	202101270718		
GAC-1-20210224	202102240313		
GAC-2-20210224	202102240314		
GAC-3-20210224	202102240315		
GAC-4-20210224	202102240316		
IX-1-20210224	202102240317		
IX-2-20210224	202102240318		
IX-3-20210224	202102240319		
IX-4-20210224	202102240320		
LH-INF-20210224	202102240321		
IX-5-20210224	202102240322		
IX-6-20210224	202102240323		
IX-7-20210224	202102240324		
IX-8-20210224	202102240325		
GAC-5-20210224	202102240326		
GAC-6-20210224	202102240328		
GAC-7-20210224	202102240329		
GAC-8-20210224	202102240330		
MB-INF-20210224	202102240331		
GAC-1-20210325	202103250304	3/25/2021	925810
GAC-2-20210325	202103250305		
GAC-3-20210325	202103250306		
GAC-4-20210325	202103250307		
IX-1--20210325	202103250308		
IX-2-20210325	202103250309		
IX-3-20210325	202103250310		
IX-4-20210325	202103250311		
GAC-1M-20210325	202103250312		
GAC-2M-20210325	202103250313		
GAC-3M-20210325	202103250314		
GAC-4M-20210325	202103250315		
IX-1M-20210325	202103250316		
IX-2M-20210325	202103250317		
IX-3M-20210325	202103250318		
IX-4M-20210325	202103250319		
IX-5-20210325	202103250321		
IX-6-20210325	202103250322		
IX-7-20210325	202103250323		

**Table E-1: Field and Lab Sample ID**  
**PFAS Treatment Pilot Study**  
 Water Replenishment District of Southern California

Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-8-20210325	202103250324	3/25/2021	925810
GAC-5-20210325	202103250325		
GAC-6-20210325	202103250326		
GAC-7-20210325	202103250327		
GAC-8-20210325	202103250328		
IX-5M-20210325	202103250329		
IX-6M-20210325	202103250330		
IX-7M-20210325	202103250331		
IX-8M-20210325	202103250332		
GAC-5M-20210325	202103250333		
GAC-6M-20210325	202103250334		
GAC-7M-20210325	202103250335		
GAC-8M-20210325	202103250336		
GAC-1-20210422	202104220331		
GAC-2-20210422	202104220332		
GAC-3-20210422	202104220333		
GAC-4-20210422	202104220334		
IX-1-20210422	202104220335		
IX-2-20210422	202104220337		
IX-3-20210422	202104220338		
IX-4-20210422	202104220339		
LH-INF-20210422	202104220340		
GAC-5-20210422	202104220341		
GAC-6-20210422	202104220342		
GAC-7-20210422	202104220343		
GAC-8-20210422	202104220344		
IX-5-20210422	202104220345		
IX-6-20210422	202104220346		
IX-7-20210422	202104220347		
IX-8-20210422	202104220348		
MB-INF-20210422	202104220351		
GAC-1-20210520	202105200575	5/20/2021	936465
GAC-2-20210520	202105200576		
GAC-3-20210520	202105200577		
GAC-4-20210520	202105200578		
IX-1-20210520	202105200579		
IX-2-20210520	202105200580		
IX-3-20210520	202105200581		
IX-4-20210520	202105200582		
GAC-1M-20210520	202105200583		
GAC-2M-20210520	202105200584		
GAC-3M-20210520	202105200585		
GAC-4M-20210520	202105200586		
IX-1M-20210520	202105200587		
IX-2M-20210520	202105200588		
IX-3M-20210520	202105200589		
IX-4M-20210520	202105200590		
GAC-1-20210603	202106030307	6/3/2021	938766
GAC-2-20210603	202106030308		

**Table E-1: Field and Lab Sample ID  
 PFAS Treatment Pilot Study**  
 Water Replenishment District of Southern California

Field Sample ID	Lab Sample ID	Collection Date	Lab Report
GAC-3-20210603	202106030309	6/3/2021	938766
GAC-4-20210603	202106030310		
IX-1-20210603	202106030311		
IX-2-20210603	202106030312		
IX-3-20210603	202106030313		
IX-4-20210603	202106030314		
LH-INF-20210603	202106030315		
LH-INF-20210603	202106030317	6/3/2021	938769
GAC-1-20210621	202106210622	6/21/2021	941985
GAC-2-20210621	202106210623		
GAC-3-20210621	202106210624		
GAC-4-20210621	202106210625		
IX-1-20210621	202106210626		
IX-2-20210621	202106210627		
IX-3-20210621	202106210628		
IX-4-20210621	202106210629		
GAC-1M-20210621	202106210630		
GAC-2M-20210621	202106210631		
GAC-3M-20210621	202106210632		
GAC-4M-20210621	202106210633		
IX-1M-20210621	202106210634		
IX-2M-20210621	202106210635		
IX-3M-20210621	202106210636		
IX-4M-20210621	202106210637		
LH-INF-20210621	202106210638		

**Table E-2: Field Precision for Detected PFAS Analytes**  
**PFAS Treatment Pilot Study**  
 Water Replenishment District of Southern California

Sample ID	Replicate Sample ID	Sample Date	Laboratory Report	Sample Description	Analyte	Sample Result (ppt)	Duplicate Result (ppt)	RPD (%)	RPD Result	Reporting Limit Comparison
MB-INF-20200424	MB-INF-DUP-20200424	4/4/2020	866700	Influent	PFOA	15	15	0.0	A	--
MB-INF-20200424	MB-INF-DUP-20200424	4/4/2020	866700	Influent	PFOS	39	40	2.5	A	--
MB-INF-20200424	MB-INF-DUP-20200424	4/4/2020	866700	Influent	PFHxS	6.8	7.2	5.7	A	--
MB-INF-20200424	MB-INF-DUP-20200424	4/4/2020	866700	Influent	PFBS	8.0	7.7	3.8	A	--
MB-INF-20200424	MB-INF-DUP-20200424	4/4/2020	866700	Influent	PFHxA	3.8	3.6	5.4	A	--
MB-INF-20200424	MB-INF-DUP-20200424	4/4/2020	866700	Influent	PFHpA	2.6	2.6	0.0	A	--
MB-INF-20200424	MB-INF-DUP-20200424	4/4/2020	866700	Influent	PFNA	3.3	3.7	11.4	A	--
LH-INF-20200424	LH-INF-DUP-20200424	4/4/2020	866700	Influent	PFOA	12	12	0.0	A	--
LH-INF-20200424	LH-INF-DUP-20200424	4/4/2020	866700	Influent	PFOS	32	32	0.0	A	--
LH-INF-20200424	LH-INF-DUP-20200424	4/4/2020	866700	Influent	PFHxS	6.3	6.9	9.1	A	--
LH-INF-20200424	LH-INF-DUP-20200424	4/4/2020	866700	Influent	PFBS	6	5.9	1.7	A	--
LH-INF-20200424	LH-INF-DUP-20200424	4/4/2020	866700	Influent	PFHxA	2.8	2.7	3.6	A	--
LH-INF-20200424	LH-INF-DUP-20200424	4/4/2020	866700	Influent	PFHpA	<2.0	<2.0	NA	--	A
LH-INF-20200424	LH-INF-DUP-20200424	4/4/2020	866700	Influent	PFNA	3	2.9	3.4	A	--
LH-INF 20200512	LH-INF-DUP-20200512	5/12/2020	870644	Influent	PFOA	13	12	8.0	A	--
LH-INF 20200512	LH-INF-DUP-20200512	5/12/2020	870644	Influent	PFOS	34	33	3.0	A	--
LH-INF 20200512	LH-INF-DUP-20200512	5/12/2020	870644	Influent	PFHxS	6.6	6.6	0.0	A	--
LH-INF 20200512	LH-INF-DUP-20200512	5/12/2020	870644	Influent	PFBS	5.8	5.9	1.7	A	--
LH-INF 20200512	LH-INF-DUP-20200512	5/12/2020	870644	Influent	PFHxA	3	2.9	3.4	A	--
LH-INF 20200512	LH-INF-DUP-20200512	5/12/2020	870644	Influent	PFHpA	<2.0	<2.0	NA	--	A
LH-INF 20200512	LH-INF-DUP-20200512	5/12/2020	870644	Influent	PFNA	3.1	2.9	6.7	A	--
LH-INF-20200526	LH-INF-DUP-20200526	5/26/2020	872940	Influent	PFOA	12	12	0.0	A	--
LH-INF-20200526	LH-INF-DUP-20200526	5/26/2020	872940	Influent	PFOS	32	31	3.2	A	--
LH-INF-20200526	LH-INF-DUP-20200526	5/26/2020	872940	Influent	PFHxS	6.2	6.2	0.0	A	--
LH-INF-20200526	LH-INF-DUP-20200526	5/26/2020	872940	Influent	PFBS	5.9	5.6	5.2	A	--
LH-INF-20200526	LH-INF-DUP-20200526	5/26/2020	872940	Influent	PFHxA	3.1	3.2	3.2	A	--
LH-INF-20200526	LH-INF-DUP-20200526	5/26/2020	872940	Influent	PFHpA	<2.0	<2.0	NA	--	A
LH-INF-20200526	LH-INF-DUP-20200526	5/26/2020	872940	Influent	PFNA	3.3	3.3	0.0	A	--
LH-INF-20200609	LH-INF-DUP-20200609	6/9/2020	875389	Influent	PFOA	12	12	0.0	A	--
LH-INF-20200609	LH-INF-DUP-20200609	6/9/2020	875389	Influent	PFOS	30	30	0.0	A	--
LH-INF-20200609	LH-INF-DUP-20200609	6/9/2020	875389	Influent	PFHxS	6.4	6	6.5	A	--
LH-INF-20200609	LH-INF-DUP-20200609	6/9/2020	875389	Influent	PFBS	5.3	5.3	0.0	A	--
LH-INF-20200609	LH-INF-DUP-20200609	6/9/2020	875389	Influent	PFHxA	2.6	2.5	3.9	A	--
LH-INF-20200609	LH-INF-DUP-20200609	6/9/2020	875389	Influent	PFHpA	<2.0	<2.0	NA	--	A
LH-INF-20200609	LH-INF-DUP-20200609	6/9/2020	875389	Influent	PFNA	3.0	3.0	0.0	A	--

**Table E-2: Field Precision for Detected PFAS Analytes**  
**PFAS Treatment Pilot Study**  
 Water Replenishment District of Southern California

Sample ID	Replicate Sample ID	Sample Date	Laboratory Report	Sample Description	Analyte	Sample Result (ppt)	Duplicate Result (ppt)	RPD (%)	RPD Result	Reporting Limit Comparison
LH-INF-20200630	LH-INF-DUP-20200630	6/30/2020	878992	Influent	PFOA	12	12	0.0	A	--
LH-INF-20200630	LH-INF-DUP-20200630	6/30/2020	878992	Influent	PFOS	30	31	3.3	A	--
LH-INF-20200630	LH-INF-DUP-20200630	6/30/2020	878992	Influent	PFHxS	6	6.3	4.9	A	--
LH-INF-20200630	LH-INF-DUP-20200630	6/30/2020	878992	Influent	PFBS	5.3	6	12.4	A	--
LH-INF-20200630	LH-INF-DUP-20200630	6/30/2020	878992	Influent	PFHxA	2.5	3.3	27.6	A	--
LH-INF-20200630	LH-INF-DUP-20200630	6/30/2020	878992	Influent	PFHpA	<2.0	<2.0	NA	--	A
LH-INF-20200630	LH-INF-DUP-20200630	6/30/2020	878992	Influent	PFNA	3	2.9	3.4	A	--
MB-INF-20200724	MB-INF-DUP-20200724	7/24/2020	883523	Influent	PFOA	15	15	0.0	A	--
MB-INF-20200724	MB-INF-DUP-20200724	7/24/2020	883523	Influent	PFOS	35	36	2.8	A	--
MB-INF-20200724	MB-INF-DUP-20200724	7/24/2020	883523	Influent	PFHxS	6.4	6.4	0.0	A	--
MB-INF-20200724	MB-INF-DUP-20200724	7/24/2020	883523	Influent	PFBS	8.8	9	2.2	A	--
MB-INF-20200724	MB-INF-DUP-20200724	7/24/2020	883523	Influent	PFHxA	4.4	4.5	2.2	A	--
MB-INF-20200724	MB-INF-DUP-20200724	7/24/2020	883523	Influent	PFHpA	3.4	3.3	3.0	A	--
MB-INF-20200724	MB-INF-DUP-20200724	7/24/2020	883523	Influent	PFNA	3.6	3.5	2.8	A	--
LH-INF-20200730	LH-INF-DUP-20200730	7/30/2020	883523	Influent	PFOA	12	12	0.0	A	--
LH-INF-20200730	LH-INF-DUP-20200730	7/30/2020	883523	Influent	PFOS	31	30	3.3	A	--
LH-INF-20200730	LH-INF-DUP-20200730	7/30/2020	883523	Influent	PFHxS	6.1	5.9	3.3	A	--
LH-INF-20200730	LH-INF-DUP-20200730	7/30/2020	883523	Influent	PFBS	5.9	5.8	1.7	A	--
LH-INF-20200730	LH-INF-DUP-20200730	7/30/2020	883523	Influent	PFHxA	3	3	0.0	A	--
LH-INF-20200730	LH-INF-DUP-20200730	7/30/2020	883523	Influent	PFHpA	<2.0	<2.0	NA	--	A
LH-INF-20200730	LH-INF-DUP-20200730	7/30/2020	883523	Influent	PFNA	3.1	3.2	3.2	A	--
MB-INF-20200813	MB-INF-DUP-20200813	8/13/2020	887122	Influent	PFOA	14	14	0.0	A	--
MB-INF-20200813	MB-INF-DUP-20200813	8/13/2020	887122	Influent	PFOS	34	34	0.0	A	--
MB-INF-20200813	MB-INF-DUP-20200813	8/13/2020	887122	Influent	PFHxS	6.1	6.3	3.2	A	--
MB-INF-20200813	MB-INF-DUP-20200813	8/13/2020	887122	Influent	PFBS	8.8	8.9	1.1	A	--
MB-INF-20200813	MB-INF-DUP-20200813	8/13/2020	887122	Influent	PFHxA	5.1	4.6	10.3	A	--
MB-INF-20200813	MB-INF-DUP-20200813	8/13/2020	887122	Influent	PFHpA	3.5	3.5	0.0	A	--
MB-INF-20200813	MB-INF-DUP-20200813	8/13/2020	887122	Influent	PFNA	3.8	3.9	2.6	A	--
LH-INF-20200827	LH-INF-DUP-20200827	8/27/2020	889747	Influent	PFOA	13	13	0.0	A	--
LH-INF-20200827	LH-INF-DUP-20200827	8/27/2020	889747	Influent	PFOS	33	32	3.1	A	--
LH-INF-20200827	LH-INF-DUP-20200827	8/27/2020	889747	Influent	PFHxS	6.4	6.3	1.6	A	--
LH-INF-20200827	LH-INF-DUP-20200827	8/27/2020	889747	Influent	PFBS	6.2	6.2	0.0	A	--
LH-INF-20200827	LH-INF-DUP-20200827	8/27/2020	889747	Influent	PFHxA	3.3	3.3	0.0	A	--
LH-INF-20200827	LH-INF-DUP-20200827	8/27/2020	889747	Influent	PFHpA	<2.0	<2.0	NA	--	A
LH-INF-20200827	LH-INF-DUP-20200827	8/27/2020	889747	Influent	PFNA	3.0	2.9	3.4	A	--

**Table E-2: Field Precision for Detected PFAS Analytes**  
**PFAS Treatment Pilot Study**  
 Water Replenishment District of Southern California

Sample ID	Replicate Sample ID	Sample Date	Laboratory Report	Sample Description	Analyte	Sample Result (ppt)	Duplicate Result (ppt)	RPD (%)	RPD Result	Reporting Limit Comparison
MB-INF-20200917	MB-INF-DUP-20200917	9/17/2020	893261	Influent	PFOA	16	16	0.0	A	--
MB-INF-20200917	MB-INF-DUP-20200917	9/17/2020	893261	Influent	PFOS	37	37	0.0	A	--
MB-INF-20200917	MB-INF-DUP-20200917	9/17/2020	893261	Influent	PFHxS	6.8	6.8	0.0	A	--
MB-INF-20200917	MB-INF-DUP-20200917	9/17/2020	893261	Influent	PFBS	9.8	9.8	0.0	A	--
MB-INF-20200917	MB-INF-DUP-20200917	9/17/2020	893261	Influent	PFHxA	6.0	6.1	1.7	A	--
MB-INF-20200917	MB-INF-DUP-20200917	9/17/2020	893261	Influent	PFHpA	4.4	4.2	4.7	A	--
MB-INF-20200917	MB-INF-DUP-20200917	9/17/2020	893261	Influent	PFNA	3.6	3.6	0.0	A	--

**Notes:**

1. The detection limit was used to calculate Relative Percent Difference (RPD) for non-detect samples and result is reported as ">" RPD%.
- 2.

$$RPD = \frac{|x_1 - x_2|}{\bar{x}} \times 100$$

Where:

RPD = relative percent difference

$x_1$  = analyte concentration in primary sample

$x_2$  = analyte concentration in duplicate sample

$\bar{x}$  = average of  $x_1$  and  $x_2$

3. A = Acceptable RPD; J = Estimated concentration
4. Only results detected in both the primary and duplicate sample are presented.

**Table E-3: Data Qualifier Summary**  
**PFAS Treatment Pilot Study**  
 Water Replenishment District of Southern California

Report Number	Sample ID	Sample Date	Analyte	Lab Result	Units	Lab Qualifier	DUS Qualifier and Bias Code	Reason for Qualification	Batch Number
871876	MB-INF-20200519	5/19/2020	Perfluorodecanoic acid (PFDA)	<0.002	ug/L	S7	UJ	Surrogate recovery	1251781
871876	MB-INF-20200519	5/19/2020	Perfluorohexanoic acid (PFHxA)	<0.002	ug/L	S7	UJ	Surrogate recovery	1251781
925810	LH-INF-20210325	3/25/2021	Alkalinity in CaCO <sub>3</sub> units	200	mg/L	H1	J	Analyzed outside holding time	1317659
925810	LH-INF-20210325	3/25/2021	Total Suspended Solids (TSS)	ND	mg/L	H1	UJ	Analyzed outside holding time	1318035
925810	MB-INF-20210325	3/25/2021	Alkalinity in CaCO <sub>3</sub> units	160	mg/L	B7, H1	J	Analyzed outside holding time	1320930
925810	MB-INF-20210325	3/25/2021	Total Suspended Solids (TSS)	ND	mg/L	H1	UJ	Analyzed outside holding time	1318035
925810	LH-INF-20210325	3/25/2021	Arsenic Total ICAP/MS	2.6	mg/L	None	J	Detected in Method Blank	1316698
925810	MB-INF-20210325	3/25/2021	Arsenic Total ICAP/MS	1.4	mg/L	None	J	Detected in Method Blank	1316698

Notes:

1. RPD = Relative Percent Difference; %R = Percent Recovery
2. DUS Qualifier Codes: U = Not detected; J = Estimated, the analyte was detected and identified.
3. MS = matrix spike; MSD = matrix spike duplicate; MB = method blank; LCS = laboratory control sample; LCSD = laboratory control sample duplicate.