TETRA TECH

April 20, 2015

Mr. Scott Miller
Remedial Project Manager
Superfund Division
Superfund Remedial Branch
Section C
U.S. EPA Region 4
61 Forsyth Street, SW
Atlanta, GA 30303

RE: **Transmittal of the Report "*Pre-Final Design for Former Process Area In-Situ Geochemical Stabilization Remediation, Former Cabot Carbon/Koppers, Inc. Site, Gainesville, Florida, Version 2*"**

Dear Mr. Miller:

On behalf of Beazer East, Inc., attached is a copy of the report entitled "*Pre-Final Design for Former Process Area In-Situ Geochemical Stabilization Remediation, Former Cabot Carbon/Koppers, Inc. Site, Gainesville, Florida, Version 2.*" Should you require additional information, please feel free to contact me at (303) 665-4390.

Sincerely,

James R. Erickson

James R. Erickson
Vice President
Principal Hydrogeologist

Enclosure

cc: S. Miller. EPA
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Pre-Final Design for Former Process Area In-Situ Geochemical Stabilization Remediation, Former Cabot Carbon/Koppers Inc. Site Gainesville, Florida

Version 2
Operable Units Two and Three (Koppers)
Gainesville, Florida
EPA ID: FLD980709356

Version 2
April 20, 2015

Prepared on behalf of Beazer East, Inc.

TETRA TECH

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APPROVAL

______________________ Date: 04/20/15

Gregory W. Council, P.E.
Supervising Contractor for Beazer East, Inc.
Tetra Tech, Inc.

______________________ Date: 04/20/15

James R. Erickson
Project Manager for Beazer East, Inc.
Tetra Tech, Inc.

CERTIFICATION

This report has been reviewed and approved by the undersigned Florida Registered Professional Geologist. Tetra Tech prepared this report in a manner consistent with sound geology practices. Furthermore, either I or engineering staff working under my supervision completed all work described herein (except as otherwise noted) and I have expertise in the discipline used in the production of this document.

____

Miguel A. Garcia, P.G.
Professional Geologist FL 2355

Date: 04/20/15

REVISION HISTORY

Version	Date	Description
1	February 13, 2015	Initial Release
2	April 20, 2015	Revised per EPA/Stakeholder comments

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APPENDICES

ABBREVIATIONS AND ACRONYMS

Addendum	Proposed DNAPL Recovery and Monitoring Well Locations, Former Process Area *In-Situ* Geochemical Stabilization Remediation Demonstration Project
bgs	Below Ground Surface
COI	Constituent of Interest
DNAPL	Dense Non-Aqueous Phase Liquid
EPA	Environmental Protection Agency
EVS©	Environmental Visualization System
F.A.C.	Florida Administrative Code
ft	Feet
g $KMnO_4$/kg	Grams of Potassium Permanganate per Kilogram of Dry Soil
GCTL	Groundwater Cleanup Target Level
gpm	Gallons per Minute
HG	Hawthorn Group
HPT	Hydraulic-Profile Tool
ISGS	*In-Situ* Geochemical Stabilization
LiCl	Lithium Chloride
LH	Lower Hawthorn
LTZ	Lower Transmissive Zone of the Upper Floridan Aquifer
msl	Mean Sea Level
PID	Photoionization Detector
pSOD	Permanganate Soil Oxidant Demand
ROI	Radius of Influence
SVOCs	Semi-Volatile Organic Compounds
Site	Koppers portion of the Cabot Carbon/Koppers Superfund Site
TIP	Temporary Injection Point
UH	Upper Hawthorn
UIC	Underground Injection Control
UTZ	Upper Transmissive Zone of the Upper Floridan Aquifer
VOCs	Volatile Organic Compounds
Workplan	Former Process Area In-Situ Geochemical Stabilization Remediation Demonstration Project Workplan for Hawthorn Group Deposits, Tetra Tech GEO, February 14, 2012
ZOD	Zone of Discharge

1.0 INTRODUCTION

This report documents the successful implementation of a pilot test to remediate subsurface dense non-aqueous phase liquids (DNAPLs) at the former Koppers, Inc. portion (the Site) of the Cabot Carbon/Koppers Superfund Site in Gainesville, Florida (Figure 1-1). Included with this report is the proposed design and implementation of the full-scale ISGS treatment of the former Process Area.

A Consent Decree between Beazer and the United States government was entered in the United States District Court for the Northern District of Florida on July 9, 2013. The Consent Decree requires Beazer to conduct certain Remedial Design and Remedial Action activities at the Site. A *Remedial Design Work Plan* (Tetra Tech, 2013) was prepared to describe the various design tasks to be undertaken by Beazer. This *Pre-Final Design* document has been prepared in general accordance with Section 2.4.1.4 of the *Remedial Design Work Plan*.

The *in-situ* geochemical stabilization (ISGS) stabilization demonstration project is partitioned into four phases consisting of the following: 1) <u>Phase I</u> – Process Area Characterization; 2) <u>Phase II</u> - ISGS Reagent Injection; 3) <u>Phase III</u> - Spot Treatment; and 4) <u>Phase IV</u> - Performance Evaluation. Phase I of the ISGS field demonstration project focused on characterization DNAPL impacts in the former Process Area. The results of the Phase I characterization were detailed in the report titled: "*Former Process Area In-Situ Geochemical Stabilization Remediation Demonstration Project: Phase I Characterization*" dated November 13, 2013 (Characterization Report). The pilot test was implemented as part of the Phase II ISGS reagent injection. The timeline for completed Phases I and II tasks is provided in Table 1-1.

The approaches to the Phase I and II work were described in the Tetra Tech GEO workplan titled: "*Former Process Area In-Situ Geochemical Stabilization Remediation Demonstration Project Workplan for Hawthorn Group Deposits*" dated May 24, 2011, and revised February 14, 2012 (Workplan), and in the Tetra Tech December 14, 2012 addendum "*Proposed DNAPL Recovery and Monitoring Well Locations, Former Process Area In-Situ Geochemical Stabilization Remediation Demonstration Project*" (Addendum). The Workplan, revised Workplan, and Addendum were approved by the U.S. Environmental Protection Agency (EPA) in email responses dated April 6, 2012; July 17, 2012; and February 11, 2013, respectively.

The ISGS pilot-test implementation approach and post-treatment evaluation were detailed in the Workplan and the Characterization Report. The U. S. EPA approval of the Phase II pilot-test approach was included with the approval of the Workplan (April 6, 2012). The pilot test implementation was consistent with the approach detailed in the Workplan and Characterization Report. The ISGS pilot-test implementation approach and results are presented in Section 2.0.

Section 3.0 of this report describes the Pre-Final Design for the full-scale implementation of the ISGS remedy for the former Process Area. The full-scale ISGS implementation for the former Process Area was developed, in part, based on data collected from the pilot test. A description of the full-scale injection approach, treatment zones and reagent volumes are included in Section 3.0.

1.1 OVERVIEW OF ISGS TECHNOLOGY

The ISGS remediation technology consists of a permanganate-based reagent (RemOx® EC) that is injected into DNAPL impacted zones for the purposes of DNAPL treatment, containment/stabilization and solute flux reduction. Aluminum silicate precipitates, with minor enhanced manganese-oxyhydroxide precipitates, are deposited around DNAPL ganglia and droplets following reagent injection. The precipitate that forms around the DNAPL effectively isolates the free-phase DNAPL from future migration and groundwater dissolution reactions. In addition to containing the free-phase DNAPL, oxidation of dissolved-phase constituents results in a “hardening” or "chemical weathering” of the DNAPL as it loses its more labile semi-volatile organic compounds (SVOCs). The deposition of the mineral shell also reduces the overall formation permeability in the treated area, thereby reducing the volumetric flux of upgradient groundwater into and through the impacted area. The ISGS processes reduce organic constituent loading to the groundwater and allow natural attenuation mechanisms to more effectively degrade organic constituents downgradient of the treated area. Thus, the remedy will reduce contaminant toxicity, mobility and volume through *in-situ* treatment.

A pilot test for the implementation of the ISGS technology was demonstrated at the Site’s former North Lagoon in 2008 (Adventus, 2008 and 2009). The primary objective of the pilot test was to stabilize DNAPLs in the Surficial Aquifer. Results from the pilot test demonstrated that reagent could be successfully delivered to impacted DNAPL zones. In addition, soil cores collected post-pilot test showed geochemical crusts surrounding DNAPL ganglia.

1.2 OBJECTIVES AND APPROACH

1.2.1 OBJECTIVES

The primary objectives of the pre-demonstration ISGS injection testing (i.e., pilot test) were: 1) Evaluate the performance of the ISGS reagent at stabilizing free-phase DNAPLs; 2) Determine radius of influence (ROI) of the injected reagent; and 3) Develop Site-specific injection parameters required for full-scale implementation of the technology in the former Process Area.

Additional information obtained from the pilot test included the following:

1) Achievable injection rates and volumes at multiple injection pressures;
2) Data from the use of a Hydraulic Profiling Tool (HPT) Test to measure *in-situ* permeability reductions resulting from ISGS reagent precipitation reactions; and

3) Injection-hole abandonment/sealing techniques to minimize short-circuiting during injection at adjacent locations.

1.2.2 APPROACH

The pilot test was performed in the most highly impacted DNAPL area of the former Process Area. This area was specifically chosen based on the elevated DNAPL impacts to ensure that the ISGS remediation technology would be effective for all DNAPL-impacted areas at the Site. The full-scale implementation of the ISGS technology for this Site necessitates a demonstration of its effectiveness for treating all subsurface DNAPL impacts.

The Phase I characterization of the spatial distribution of DNAPL impacts in the former Process Area was performed in 2012 and 2013. This investigation was one of the most extensive characterizations of a historical DNAPL source area. It consisted of installing 105 borings on 40-foot centers to establish the locations with DNAPL impact zones to target during the pilot test. Nine additional monitoring wells and 10 DNAPL recovery wells were installed to monitor the DNAPL impacts and water quality pre- and post-ISGS injections. The Workplan for the pilot test was developed prior to the investigation; based on the investigation, further clarification of approach for the pilot test was provided in the Characterization Report.

The pilot-test area is located in the northeast corner of the former Process Area and was approximately 70 feet by 80 feet. The injection points were located in a grid-like pattern throughout the pilot-test area and included two temporary injection points (TIPs). Most injection locations were advanced to depths between 55 and 65 feet below ground surface (bgs). Direct-push injections were performed with a Geoprobe® rig. Targeted injection depths were determined by the Environmental Visualization System© (EVS©) model generated during characterization.

Continuous post-injection, geologic cores were collected from ground surface to the terminus of the borehole at an approximate depth of 65 feet. Post-injection core collection was performed using rotasonic drilling methods. Geologic cores were characterized for the following: 1) Volatile organic vapors (VOCs) using a photo-ionization detector (PID); 2) ISGS reagent presence; and 3) Untreated DNAPL.

1.3 SITE LOCATION AND DESCRIPTION

The Site encompasses approximately 90 acres and is located within the Gainesville city limits in Alachua County, Florida (Figure 1-1). It was used as an active wood-treating facility for more than 90 years, but operations ceased in early 2010. The Site is located in an area of the city that is zoned industrial, with surrounding commercial and residential zoned properties. The adjacent property to the east of the Site is the former Cabot Carbon Superfund Site. This property was redeveloped for commercial use in the 1990s. The adjacent property to the north is the City of Gainesville vehicle/equipment maintenance facility. The properties to the west are private residences, and the properties to the south are a mixture of commercial and residential properties.

The Site is located on a gently sloping plain at an elevation of approximately 180 feet above mean sea level (msl). The ground surface immediately around the Site has low relief and slopes gently to the northeast. In general, the ground surface at the Site slopes gently to the north. From the southern property boundary to the northern property boundary (approximately 3,000 ft), the land-surface elevation decreases from approximately 190 feet to 170 feet above msl. A stormwater drainage ditch bisects the Site and flows in a north to northeasterly direction.

1.4 HYDROGEOLOGY

The hydrogeology of the Site has been thoroughly investigated and analyzed over the past 25 years by numerous investigations (TRC, 2003; GeoTrans, 2004a, 2004b, 2005 and 2009; Adventus, 2009). Over 200 wells have been installed at the Site and 100 characterization borings in the former Process Area where geologic cores have been collected to characterize deposits. A simplified hydrostratigraphic model of the local geology is shown in Figure 1-2.

1.4.1 SURFICIAL AQUIFER

The Surficial Aquifer consists of approximately 16 to 22 feet of marine-terrace deposits, primarily consisting of unconsolidated, fine- to medium-grained sand with thin layers of interbedded silt and clay deposits. Groundwater flow in the Surficial Aquifer is primarily controlled by surface topography and localized discharge points such as wetlands, creeks, and drainage ditches. The Surficial Aquifer is not a source of potable groundwater on or around the Site.

The local groundwater flow direction for the Surficial Aquifer at the Site is from southwest to northeast. A hydraulic-containment system was installed in the Surficial Aquifer at the Site in 1995 to capture impacted groundwater prior to it flowing off Site. Groundwater extraction occurs from a series of shallow downgradient extraction wells along the eastern and northern property boundary. In addition, four approximately 250- to 300-foot long Surficial Aquifer groundwater collection drains were installed in 2009 adjacent to each of the four former source areas to recover impacted groundwater in proximity to the sources. Total groundwater extraction from the wells and Surficial Aquifer groundwater collection drains average approximately 60 gallons per minute (gpm).

1.4.2 HAWTHORN GROUP DEPOSITS

The Hawthorn Group (HG) deposits underlie the Surficial Aquifer and consist of a thick sequence of interbedded low- and moderate-permeability, unconsolidated sedimentary materials. The HG deposits are approximately 115 to 125 feet thick at the Site consisting of low-permeability clay, clayey sand, and silt deposits interbedded with moderate-permeability sand, silty sand, and carbonate deposits. Three major clay units are present in the HG deposits termed the upper clay, middle clay, and lower clay units. The upper clay unit is approximately 3 to 5 feet thick, the middle clay unit is approximately 10 to 15 feet thick and the lower clay unit is approximately 30 to 35 feet thick at the Site. Moderately permeable sedimentary deposits that lie between the HG upper and middle clay units have been termed the Upper Hawthorn (UH) and moderately permeable sedimentary and carbonate deposits that lie between the HG middle and lower clay units have been termed the Lower Hawthorn (LH) (Figure 1-2).

The HG deposits effectively separate the overlying Surficial Aquifer from the underlying Floridan Aquifer as indicated by the approximately 120 feet of hydraulic-head difference between these two aquifers. The majority of the hydraulic-head loss is across the lower clay unit, with a hydraulic-head difference of approximately 90 feet. Hydraulic-head difference across the upper clay unit is about 2 feet and the head difference across the middle clay unit is about 30 feet. Hence, each of the clay units provides some level of protection, with the upper clay unit acting as the first of three hydraulic traps mitigating vertical DNAPL migration.

Lateral groundwater flow within the UH is generally to the northeast at the Site mirroring the groundwater flow direction in the Surficial Aquifer. Lateral groundwater flow in the LH changes from east to west across the Site. A groundwater divide is present in the LH, which is oriented southeast to northwest. Groundwater flow in the LH on the eastern half of the Site is to the north-northeast and groundwater flow on the western half of the Site is to the north-northwest. The HG deposits are not locally used for potable water due to the low permeability of the formation in this area.

1.4.3 UPPER FLORIDAN AQUIFER

The Floridan Aquifer underlies the HG deposits and is subdivided into two aquifers, the Upper Floridan and the Lower Floridan Aquifers. The Upper Floridan (UF) Aquifer is the most widely used aquifer in this area and locally consists of the Ocala Limestone and Avon Park Formations. The Lower Floridan Aquifer is typically not utilized in this area due to its greater depth. The two primary formations that comprise the UF Aquifer are the Ocala Limestone and the Avon Park Formation (Figure 1-2). The Upper Transmissive Zone (UTZ) is a secondary water-producing interval for the UF Aquifer and is located in the uppermost portion of the Ocala Limestone. The thickness of the UTZ is also highly variable, ranging from 50- to 100-feet in thickness. The Lower Transmissive Zone (LTZ) is the major water-producing interval for the Murphree Wellfield in Alachua County. The LTZ is located at the contact of the Ocala Limestone and Avon Park and is highly variable in thickness ranging from 20 to 100 feet (GeoSys, Inc., 2000).

The top of the Upper Floridan Aquifer is at a depth of approximately 140 to 150 feet at the Site. Regional groundwater flow within this aquifer is to the northeast towards the Murphree wellfield. The cone of depression resulting from the Murphree wellfield encompasses the Site resulting in the northeastern flow direction. The groundwater flow direction at the Site generally mimics the regional flow direction toward the wellfield; however, secondary permeability features in this aquifer result in some localized variations from the northeastern flow direction. The hydraulic gradient and groundwater velocities are projected to be low between the Site and wellfield.

2.0 PRE-DEMONSTRATION ISGS REMEDY IMPLEMENTATION

The former Process Area pre-demonstration ISGS injection testing was used to determine the effectiveness of ISGS reagent and delivery in order to more effectively implement the full-scale ISGS remedy. The pilot-test location was selected based on the elevated DNAPL impacts in this area, as discussed in section 1.2.2. DNAPL recovery rates and volumes for the pilot test area were the highest for both recovery wells and TIPs.

During the Phase I characterization, the spatial distribution of DNAPL in the Surficial Aquifer and UH was established by utilizing data collected as described in the Characterization Report. EVS© software (C Tech, 2010) was used to evaluate the relative DNAPL saturation in three-dimensions. Borehole lithology and relative permeability data were entered into the EVS© model to assist with identifying potential lithologic and permeability controls on the reagent injections.

This section will discuss: 1) Geochemical analyses of cores; 2) Aquifer tests results for the former Process Area; 3) Pilot test implementation; 4) Performance monitoring pre- and post-ISGS treatment; 5) ISGS injections ROI; and 6) Zone-of-discharge monitoring.

2.1 GEOCHEMICAL ANALYSIS

During the Phase I characterization of the former Process Area, select core samples were submitted to analyze the permanganate soil oxidant demand (pSOD) to evaluate effects of short-term ISGS reagent exposure on UH cores, per the approved Workplan. A total of six 5-gallon buckets filled with soil cores were collected during this investigation for laboratory pSOD analysis; four of the 5-gallon buckets were filled with soil from DNAPL-impacted cores and the two remaining 5-gallon buckets were filled with soil from cores that were not visually impacted with DNAPL. Representative DNAPL-impacted cores ("DNAPL-rich") from the Surficial Aquifer were composited into two 5-gallon buckets and representative DNAPL-impacted cores from the UH were composited into two 5-gallon buckets. Surficial Aquifer soil cores that were not visually impacted with DNAPL were composited into one 5-gallon bucket. Similarly, UH non-impacted soil cores were composited into one 5-gallon bucket. The six 5-gallon buckets of soil core were shipped to Adventus for pSOD analysis.

Results from laboratory pSOD analysis are provided in Table 2-1. For the Surficial Aquifer and UH, the DNAPL-poor (i.e., "non-impacted soil") samples averaged a pSOD value an order of magnitude lower than the DNAPL-rich samples (i.e., creosote DNAPL impacted-soil). The pSOD for DNAPL-poor samples from the former Process Area were 2.90 grams of potassium permanganate per kilogram of dry soil (g $KMnO_4$/kg) for the Surficial Aquifer and 2.59 g $KMnO_4$/kg for the UH. In contrast, the pSOD for the DNAPL-rich samples for the Surficial Aquifer ranged from 24.24 and 26.68 g $KMnO_4$/kg in the former Process Area and former North Lagoon, respectively. The pSOD for the DNAPL-rich samples in the UH were 34.77 and 39.83 g $KMnO_4$/kg in the former Process Area and former North Lagoon, respectively.

The Workplan proposed column testing of ISGS reagent to evaluate reagent reaction times and effects of long-term injections on permeability of the samples. Initial testing of the reagent on DNAPL-rich soil columns demonstrated that the tests would not provide the necessary data to evaluate the potential reduction in injection rates long-term. With relatively high reagent injection rates (5.6 ml/min), the laboratory was able to saturate the columns after 47 minutes. However, when the injection rates were reduced by a factor of ten (0.57 ml/min), the columns sealed off after reagent penetrated about 1/3 of the way through the column (approximately 76 minutes into the test). With the lower injection reagent rates the laboratory was unable to flush reagent through the soil column prior to the formation of precipitates that effectively sealed the columns. Therefore, Beazer East, Inc. requested and received permission from the EPA (EPA, 2014) to eliminate the column testing.

2.2 AQUIFER TESTS

Aquifer tests were performed to evaluate reduction in the permeability of deposits in the Surficial and UH following full-scale ISGS reagent injections. Aquifer tests in the former Process Area occurred prior to the ISGS reagent injections to assess pre-injection hydraulic-conductivity values. The post-injection hydraulic conductivity tests will be performed after the full-scale ISGS treatment is performed for the former Process Area. Aquifer test locations were chosen for wells with little or no free-phase DNAPL. The AQTESOLV® software was used to analyze all aquifer test data.

2.2.1 MULTIPLE-WELL PUMPING TEST

One of the criteria for selecting wells for a multiple-well pumping test was that no DNAPL was present in the well so that the pumped water could be treated at the on-Site water treatment plant. Emulsified DNAPL resulting from the pumping test would clog treatment plant filters. Another criterion was that the wells should be in an area of the former Process Area that will be treated by the full-scale ISGS injections. There are limited wells in proximity (less than 50 feet) to be used for a multiple-well pumping test. There were no UH wells in the former Process Area that did not contain DNAPL. In addition, none of the UH monitoring wells were in proximity to conduct a multiple well test. Therefore, a multiple-well pumping tests was not performed in the UH.

For the Surficial Aquifer pumping test, extraction well M-40BE was utilized as the pumping well and wells PW-1, OW-1, OW-2, M-42BE, and M-41BE were used to monitor the response in the Surficial Aquifer (Figure 2-1a). The pumping test was performed for a period of 6 hours followed by a 1 hour recovery period.

Results for the Surficial Aquifer pumping test are provided in Table 2-3. The AQTESOLV® pumping test type-curve matches are provided in Appendix A. The maximum pumping rate that could be sustained without dewatering the pumping well (M-40BE) was approximately 1 gal/min. The drawdown resulting from this pumping rate was approximately 7.5 feet in the pumping well (M-40BE). Monitoring well PW-1 had approximately 0.2 feet of drawdown and OW-1 had approximately 0.18 feet of drawdown. Analysis results are provided for pumping well M-40BE and observation wells PW-1 and OW-1, located 17 and 22 feet from M-40BE, respectively. Monitoring wells OW-2, M-42BE, and M-41BE are located at distances of 40 to 60 feet from pumping well M-40BE. The pumping test results for observation wells OW-2, M-42BE, and M-41BE are not provided because drawdown affects resulting from M-40BE pumping were not observed at these wells.

The hydraulic-conductivity values calculated for observation wells PW-1 and OW-1 were 10.5 and 13.5 ft/day, respectively. The analysis of drawdown at the pumping well M-40BE resulted in a hydraulic-conductivity value of 0.9 ft/day. This low hydraulic-conductivity value for pumping well M-40BE likely reflects well losses through the well screen and is not representative of formation permeability.

Surficial Aquifer pumping tests were performed at the Site in 1993 and 1994 by McLaren Hart (TRC, 1999). The 1999 TRC report indicated that Surficial Aquifer horizontal hydraulic-conductivity values ranged from 16 to 29 ft/day. The average hydraulic-conductivity of 12.0 ft/day measured in the 2014 pumping test is less than the values measured in 1993 and 1994, but reasonably close given the heterogeneity of the formation.

2.2.2 Slug Tests

Five Surficial Aquifer wells and five UH wells were selected for rising/falling head slug tests (Figure 2-1b). For each test, a transducer was placed in the well to monitor the water-level change resulting from instantaneously adding and removing a slug in the well. The rate at which the water level recovers is related to the formation permeability. The procedure for conducting the slug tests was to rapidly insert a 10-ft slug rod into the well to instantaneously displace a column of water (falling-head slug test). The water level was monitored until it recovered to within approximately 10 percent of the static water level (recovery period varied from minutes to hours). Once the water level recovered to static conditions, the rod was removed from the well resulting in an instantaneous decline in water level. The water level recovery to static conditions was a second independent slug test for the well (rising-head slug test). Water-level displacement is plotted against time and compared to theoretical type curves to obtain the hydraulic-conductivity estimate for the formation.

Slug tests were performed in ten monitoring wells as described above. The only exception is that a rising-head slug test was not conducted in monitoring well HG-40SE because the falling-head slug test took more than 3 hours to recover. The hydraulic-conductivity values derived from the rising and falling head slug tests for Surficial Aquifer monitoring wells ranged from 1.5 to 44.7 ft/day (Table 2-4). The average hydraulic-conductivity value for the Surficial Aquifer was 9.2 ft/day (the highest and lowest values were eliminated from the calculated average). The average of the rising and falling head slug tests, for each of the four UH monitoring wells, ranged from 0.5 to

1.2 ft/day (Table 2-4). The hydraulic-conductivity value resulting from the falling-head slug test performed in recovery well HG-40SE of 0.3 ft/day. The average slug test hydraulic-conductivity value for the UH is 0.8 ft/day (the highest and lowest values were eliminated from the calculated average). Based on the slug test results, the Surficial Aquifer permeability is approximately one order of magnitude higher than the UH deposits.

In general, slug test are considered less reliable indicators of average formation permeability because of the small volume of aquifer tested by the slug tests (a few feet radially from the well screen). The pumping test represents average formation permeability at a radius of 10s of feet from the pumping well. The Surficial Aquifer average hydraulic-conductivity value measured from slug tests (9.2 ft/day) was approximately equal to the multi-well pumping test value (12.0 ft/day). Independent measurements of Surficial Aquifer permeability resulted in similar results.

2.2.3 Hydraulic-Profiling Tool

The relative permeability of deposits within the pre-injection test area was measured with a hydraulic-profiling tool (HPT) to evaluate the potential reduction in permeability pre- and post ISGS reagent injection. The HPT measures permeability continuously as a function of depth as the tool is advanced. The HPT method utilizes direct-push technology to measure relative permeability of deposits. The method is based on injecting small volumes of fluid, while simultaneously measuring the pressure dissipation as a function of time as the tool is continuously advanced. It was anticipated that approximately five HPT locations would be tested in the pilot test area. The relative permeability of deposits from land surface to the top of the HG middle clay unit was measured with the HPT method to establish baseline conditions in the pre-demonstration area. The Workplan assumed that approximately 3 months following ISGS reagent injections, post-injection HPT measurements will be performed in the test area to evaluate relative reductions in permeability for the area.

HPT testing was performed within a 20 by 20 ft area of the pilot test area (Figure 2-2). Five locations were initially targeted for the HPT testing; however, only three of the locations were tested during the actual implementation. The results of the first three HPT test locations resulted in similar plots of relative permeability; therefore, the HPT testing was not performed at the remaining two locations.

Plots of the HPT test results for the three locations are provided in Appendix B. The estimated hydraulic-conductivity values resulting from the HPT testing were obtained for the Surficial Aquifer and upper 10 feet of the UH. Hydraulic-conductivity values for the lower portion of the UH were too low to be accurately estimated within the sensitivity of the tool and method. The lowest hydraulic-conductivity value discernable with the tool and method was approximately 5 ft/day (1.8×10^{-3} cm/sec). The hydraulic-conductivity values measured during this test ranged from 5 to 45 ft/day. The small volume of aquifer tested by the HPT method raises the question of how representative these values are for the larger-scale average permeability of the pilot-test area. Post-ISGS HPT testing was not performed since the pre-injection test results did not provide useful information to quantify the larger-scale changes in formation permeability.

2.3 PILOT TEST IMPLEMENTATION

2.3.1 DESIGN

The pilot test injection locations strategically target DNAPL impacts identified during the Phase I characterization (Figure 2-3, Figure 2-4a, Figure 2-4b, and Figure 2-4c). The initial pilot test injection point locations presented in the Workplan and Characterization Report were based on a triangular pattern with approximately 20-foot spacing between injection points (Figure 2-3). The 20-foot grid spacing was based on an injection radius of approximately 15 feet. The locations of a few injection points were changed during the field implementation to focus on more recent DNAPL impacts in the western portion of the pilot test area. The more conservative 20-foot grid spacing (10-foot radius) was chosen in order to treat areas that lie between the hypothesized cylindrical treatment areas. The 20-foot grid spacing results in circular areas that overlap by 5 feet and helps to ensure that sufficient volumes of reagent are injected to treat both the cylindrical areas and the intervening areas.

The reagent injection volume was based on previous laboratory column experiments (Adventus, 2004 and 2005). The results of these column experiments demonstrated that a reagent volume of approximately 5 to 10 percent of the pore space was sufficient to treated impacted soils at the Site. The former North Lagoon pilot test estimated a reagent application rate of 6.5 percent of the pore space, which assumed a Surficial Aquifer porosity of 20 percent and a 10 foot ROI and a thickness of 20 feet (Adventus, 2008a). For this pilot test the average effective porosity for the Surficial Aquifer and UH was assumed to be 15 percent, with an injection ROI of 15 feet and a reagent volume of 7 percent of the pore space. The smallest interval treated was 2 feet, the length of the injection tool. Based on the assumptions above, a total of 111 gallons of reagent was required for each 2-foot injection zones.

Top-to-bottom injections were designed to help ensure that the reagent was injected at the target depth. One potential issue with the more traditional bottom-to-top approach to injections is the potential for short-circuiting of reagent in the open borehole below the injection tool, resulting in loss of reagent to intervals not targeted for treatment. A Geoprobe® rig was used for reagent injections. Reagent was injected through a high-pressure hose that ran down the center of the 2-inch inside-diameter (2.25-inch outside-diameter) drill casing and was connected to the 2-foot long injection tool. Targeted injection intervals are provided in Table 2-2.

One TIP was chosen to evaluate the potential reduction in formation and backfill permeability due to precipitation of reacted reagent. The objective of this test was to evaluate the viability of re-using the TIP for multiple injection events. The potential exists for TIPs becoming plugged after one use due to precipitation of reacted reagent. The question addressed by this test is whether TIPs could be used multiple times for future reapplication. The equipment used to mix reagent and inject into the TIP was similar to the direct-push points, with the exception the injection hose was connected directly to the TIP 1-inch PVC casing. The volume of reagent targeted for injection into the TIP was 444 gallons, which is based on an 8-foot long perforated interval.

The RemOx® EC was mixed in 250-gallon totes immediately prior to injections to help ensure that solids added to the mixture stay in solution. Lithium chloride (LiCl) was added to the reagent mixture at a concentration of 6 grams per 250-gallon tote (lithium concentration of approximately 1,000 µg/L per 250 gal tote). The lithium tracer will be used to help evaluate potential dilution of COIs in post-injection groundwater samples due to pore-water displacement by the reagent.

One issue that was anticipated for the pilot-test injections was daylighting (i.e., short circuiting) of the reagent at surrounding TIPs and previously completed injection points. To prevent potential ISGS reagent daylighting (i.e., flowing vertically upward through the formation and/or borehole and discharging at land surface) the injection borings were abandoned by backfilling with cement-bentonite grout mixture (6.5 gallons per 94 lb sack of cement with 3 to 5 percent bentonite). The injection boreholes were grouted through the same injection casing and high-pressure hose used for the reagent injection. The ability to both inject and grout through the injection casing string was specifically developed for this project to expedite the sealing of the boreholes during full-scale implementation. The procedure for grouting the boreholes was the following:

1) Reagent remaining in the injection hose after treating targeted intervals was flushed into the formation with a slug of water;
2) The injection string was then pulled up approximately 5 feet to allow the 2-inch long drive tip to fall to the bottom of the hole. This allows for the injection string to act as a tremie pipe, such that grout could flow out the bottom of the string as the casing is removed from the borehole;
3) The high-pressure injection hose was connected to the grout pump to place grout as the casing string is removed from the hole.

One of the primary objectives during grouting was to not inject grout out of the borehole and into the formation. The use of a disposable knockout tip in the injection tool allowed the grout to fill the open borehole rather than forcing grout laterally through the injection ports.

2.3.2 ISGS Reagent Injections

ISGS reagent injections were performed in general accordance with the Workplan and Characterization Report. The pilot test consisted of injecting reagent via 12 direct-push borings and one TIP (Figure 2-2). The Workplan and Characterization Report stated that 11 direct-push borings would be installed for this pilot test; however, an additional injection point was added to the pilot test program during field implementation to evaluate the potential for reagent short circuiting through non-grouted boreholes. In addition, a few of the proposed injection points were relocated in the field to address impacts based on more recent DNAPL recovery data from TIPs. Injections were performed from March 26 to April 11, 2014.

A Geoprobe® rig was used to install the 12 direct-push injection locations (Figure 2-2). The downhole injection string consisted of 2.25-inch diameter drill rods, 1-inch nominal diameter high-pressure injection hose and a 2-foot long injection tool. Proposed versus actual injection zones and reagent volumes are provided in Table 2-2. Appendix C shows individual injection point injection intervals, volumes, and flow rates. Continuous geologic cores were not collected for the injection point locations; therefore, the stratigraphy for injection points in Appendix C is from TIPs or monitoring wells in proximity to the injection locations.

Two proposed injection-point locations (PT4 and PT8) were not used during the pilot test because reagent originally designated for these locations was reallocated to three new injection point locations (PT12, PT13, and PT14). Injection points (PT12 and PT13) were added in the field to address DNAPL impacts in the western portion of the pilot test area in the vicinity of TIP 420N/345E. Injection point PT14 was added to evaluate the potential for reagent short circuiting through a non-grouted borehole. In addition, to the relocation of the two injection points, some of the originally proposed injection point locations were shifted a few feet to avoid existing structures, such as cement slabs.

Some of the targeted treatment intervals were low-permeability deposits that would not accept the entire volume of reagent proposed for the interval. When reagent refusal was encountered, the reagent volume that could not be injected was injected into deeper targeted intervals. Similarly, when reagent short circuited up the outside of the drill string during injections, injections ceased for this interval; any reagent that was not injected into the interval was added to the volumes injected into deeper intervals. Therefore, some of the targeted injection intervals received less than the targeted volume whereas other intervals received more than the 111 gallons allocated for that interval.

Direct-Push Injections

The injection of reagent via the direct-push method was successful. The method successfully delivered the approximate volume of reagent at the majority of the injection-point locations. The pilot test was designed to inject 18,821 gallons of reagent and a total of 19,512 gallons of reagent was injected.

The injection pressures required to deliver reagent to the targeted intervals was typically less than 80 psi; however, in a few cases pressures around 110 psi were required. Injection pressures tended to be lower in the Surficial Aquifer than in the UH. Once reagent flow was initiated, injection pressures required to maintain flow ranged from less than 20 to 40 psi in the Surficial and 70 to 110 psi in the UH. In general, higher injection pressures were required to maintain flow rates in the UH.

Flow rates are related to injection pressures. Increasing the injection pressure, typically results in increased reagent flow rates for a specific zone. An attempt was made to keep flow rates under 10 gal/min. Flow rates varied in the Surficial Aquifer and UH, with median flow rates of approximately 6 and 8 gal/min, respectively. Flow rates in the lower portion of the Surficial Aquifer and upper clay unit of HG Deposits tended to be slightly higher than zones above or below. Typically, higher sustained injection flow rates resulted when higher initial pressures were required to initiate reagent flow. These higher flow rates likely corresponded to the establishment of preferential flow paths in lower permeability deposits. Hence, flow rates tended to be higher for zones that required higher initial pressures to start flow.

When daylighting was observed, injection for that interval ceased and the injection tool was advanced to the next targeted interval. Reagent that daylighted during injection was captured with a shop vacuum and neutralized with a solution consisting of water, vinegar and peroxide. Residual amounts of remaining reagent were neutralized by spraying with the solution.

The disposable knockout tip was used to grout boreholes at the completion of injection. The knockout tip worked flawlessly and was successfully used to grout all pilot test boreholes.

The following is a summary of individual injection points. More detailed information for each of the injection points is provided in Table 2-2 and Appendix C.

Injection Point PT1

This injection point was designated to receive 2,554 gallons of reagent (Table 2-2). The total volume of reagent was injected; however, 156 gallons targeted for the Surficial Aquifer was injected into the UH due to daylighting issues. Daylighting was observed while injecting into the Surficial Aquifer (13-15 feet bgs) and while injecting into the UH (45-47 feet bgs) (Appendix C).

Injection flow rates ranged from 3 to 8.5 gal/min in the Surficial Aquifer and from 4 to 9 gal/min in the UH.

Injection Point PT2

This injection point was designated to receive 2,443 gallons of reagent (Table 2-2). The total volume of reagent was injected; however, 122 gallons targeted for the Surficial Aquifer was injected into the UH due to daylighting issues.

Daylighting was observed while injecting into the Surficial Aquifer (17-21 feet bgs) and while injecting into the UH (45-47 feet bgs) (Appendix C). The top of the HG upper clay unit is at a depth of approximately 21 feet. Injections were performed from 21 to 23 feet at 3 gal/min and an injection pressure of 80 psi. Injections at this and other locations within the pilot test area demonstrate that reagent can be injected into the lower permeability clays. The post injection cores show that the reagent flowed through bedding planes and sandier units within the upper clay unit.

Injection flow rates ranged from 3.5 to 13 gal/min in the Surficial and 3 to 11 gal/min in the UH.

Injection Point PT3

This injection point was designated to receive 1,055 gallons of reagent (Table 2-2). The total volume of reagent was injected. No daylighting was observed while injecting at this location (Appendix C).

Injection flow rates were 7.5 gal/min in the Surficial Aquifer and ranged from 6 to 8.5 gal/min in the UH.

Injection Point PT4

The injection point was designated to receive 944 gallons of reagent (Table 2-2). A field determination was made to remove this injection point from the pilot test and reallocated the reagent volume proposed for this location to a new location. No reagent was injected at this location.

Injection Point PT5

The injection point was designated to receive 2,332 gallons of reagent (Table 2-2). The total volume of reagent was injected; however, 616 gallons of the reagent targeted for the Surficial Aquifer was injected into the UH due to daylighting issues. Daylighting was observed while injecting into the Surficial Aquifer (11-19 feet bgs) and while injecting into the UH (21-23 feet bgs) (Appendix C).

Injection flow rates ranged from 5 to 5.5 gal/min in the Surficial Aquifer and 4.5 to 11 gal/min in the UH.

Injection Point PT6

The injection point was designated to receive 1,055 gallons of reagent (Table 2-2). Only 839 gallons of reagent was injected at this location. Approximately 216 gallons was not injected because of daylighting issues in the Surficial Aquifer and UH. Daylighting was observed while injecting into the Surficial Aquifer (13-17 feet bgs) and UH (50-54 feet bgs) (Appendix C). The 216 gallons of reagent not injected at this location was injected at PT7.

Injection flow rates ranged from 4 to 11 gal/min in the Surficial Aquifer and 6 to 11 gal/min in the UH.

Injection Point PT7

The injection point was designated to receive 999 gallons of reagent (Table 2-2). All reagent at this location was targeted for injection into the UH. The total volume of reagent was successfully injected. In addition, the 216 gallons of reagent remaining from PT6 was injected at this location. No daylighting was observed while injecting at this location (Appendix C).

Injection flow rates ranged from 4 to 8.5 gal/min in the UH.

Injection Point PT8

The injection point was designed to receive 1,832 gallons of reagent (Table 2-2). A field determination was made to remove this injection point from the pilot test and reallocated the reagent volume initially proposed for this location to a new location. The reagent proposed for this area was reallocated to injection points PT-11 and -12. No reagent was injected at this location.

Injection Point PT9

The injection point was designated to receive 1,888 gallons of reagent (Table 2-2). The total volume was injected; however, 77 gallons targeted for the Surficial Aquifer was injected into the UH because of daylighting issues. Daylighting was observed while injecting into the Surficial Aquifer (21-23 feet bgs) and the UH (25-27 feet bgs) (Appendix C).

Injection flow rates ranged from 5 to 5.75 gal/min in the Surficial Aquifer and 5 to 9.5 gal/min in the UH.

Injection Point PT10

The injection point was designated to receive 1,110 gallons of reagent (Table 2-2). The total volume was injected. A 1-foot zone (25-26 ft bgs) in the Surficial Aquifer was initially designated for treatment with 56 gallons of reagent. Because of the addition of injection points PT12, PT13 and PT14 to this area, the impacted 1-foot zone was determined to be within the radius of influence from injections at these locations. Therefore, a field determination was made to inject the 56 gallons allocated to the Surficial Aquifer into the UH, to allow more treatment of the deeper DNAPL impacts in this area. No daylighting was observed while injecting at this location (Appendix C).

Injection flow rates ranged from 7 to 10 gal/min in the UH.

Injection Point PT11

The injection point was designated to receive 1,277 gallons of reagent (Table 2-2). The total volume was injected; however, 111 gallons targeted for the Surficial Aquifer was injected into the UH due to daylighting issues. Daylighting was observed while injecting into the Surficial Aquifer and upper clay unit (23-25 feet bgs) (Appendix C).

Injection flow rates ranged from 3.5 to 12 gal/min in the UH.

Injection Point PT12

This injection point was added to the pilot test during field implementation, as previously discussed. The total volume injected was 1,832 gallons (Table 2-2). The targeted injection zones and reagent volumes at this location were similar to adjacent injection point PT9. Daylighting was not observed while injecting into the Surficial Aquifer or UH (Appendix C).

Injection flow rates ranged from 5.5 to 8 gal/min in the Surficial Aquifer and 7.5 to 14 gal/min in the UH.

Injection Point PT13

This injection point was added to the pilot test during field implementation, as previously discussed. The total volume injected was 1,832 gallons (Table 2-2). The targeted injection zones and reagent volumes at this location were similar to adjacent injection point PT9. Daylighting was observed while injecting into the Surficial Aquifer (19-21 and 23-25 feet bgs) (Appendix C).

Injection flow rates ranged from 5.75 to 7.5 gal/min in the Surficial Aquifer and 6.5 to 8.5 gal/min in the UH.

Injection Point PT14

This injection point was added to the pilot test during field implementation, to evaluate the potential for reagent short circuiting through non-grouted boreholes. The total volume injected was 595 gallons (Table 2-2). Daylighting was observed while injecting into the Surficial Aquifer (15-17 feet bgs) (Appendix C). Because of daylighting issues the total volume of reagent was not injected into the last of the three targeted zones for Surficial Aquifer.

Injection flow rates ranged from 6.5 to 11 gal/min in the Surficial Aquifer and 5 to 11 gal/min in the UH.

TIP Injections

The ability to perform multiple ISGS reagent injections in to TIPs was tested as part of this demonstration project. The primary objective for reagent injection at TIPs was to evaluate whether the TIP backfill and/or formation becomes plugged over time due to the precipitation of minerals resulting from reagent/organic reactions. A test of multiple injections was performed at one TIP located within the pilot test area.

TIP 440N/380E

TIP 440N/380E is located on the northeastern corner of the pilot test area. This TIP has never contained free-phase DNAPL, since it was installed in 2012; however, it is located in proximity to one of the more highly DNAPL-impacted areas of the former Process Area.

A total of 444 gallons of reagent was injected into the UH via this TIP. A constant injection flow rate of approximately 4 gal/min was maintained, with an injection pressure of 60 psi. No daylighting was observed. Approximately 2 weeks following the initial injection, an additional 100 gallons was injected into this TIP. Initially, a total of 444 gallons was proposed to be injected at this location. Because a constant injection flow rate of 5 gal/min was quickly attained with an injection pressure of 75 psi, it was established that reinjection into a TIP was feasible. Therefore, injections were stopped after 100 gallons, rather than wasting reagent in an area not requiring treatment. The injection flow rates were essentially the same during both injection events. This test demonstrated that reinjection at TIPs appears viable for the full-scale application, if needed.

TIP 420N/345E

This TIP was initially proposed for reagent injections during the pilot test. DNAPL recovery started at this TIP in early 2014, after the Workplan and Characterization Report were finalized. Because of significant DNAPL recovery at this TIP, it was subsequently decided to use this TIP for pilot test performance monitoring. No reagent injections were performed at this TIP.

2.3.3 Borehole Short-Circuiting Evaluation

Injection point PT14 was used to test the potential for short-circuiting of reagent through non-grouted injection points. Injection point PT6 was not grouted following the completion of injections at this location to allow for testing of injections at an adjacent point. Injection point PT14 was installed approximately 10 feet from PT6 and injections were performed into the Surficial and UH. Injections into the Surficial Aquifer at PT14 (10 to 18 feet bgs) resulted in reagent short circuiting outside of the injection casing; therefore, the injection into the Surficial Aquifer was stopped and the injection casing was advanced into the UH (43 to 49 feet bgs) to continue injections.

During the injections into the Surficial Aquifer at PT14, there was no observable short-circuiting of reagent at the non-grouted injection point PT6; however, the test was stopped before the full volume of reagent was injected. Similarly, there was no observable short circuiting of reagent at PT6 during injections in the UH. PT6 and PT14 were grouted at the completion of the test.

The test did not result in observable reagent short circuiting at an adjacent borehole located approximately 10 feet from the injections. However, the test was not able to evaluate subsurface short circuiting within the open borehole. While this test showed that short circuiting to land surface via a nongrouted borehole did not occur, it did not provide information on short circuiting within boreholes to non-designated treatment zone.

2.3.4 Formation Pressurization From Reagent Injection

Continuous water-level monitoring was performed during reagent injections to provide quantitative data on formation pressures. Pressure recording transducers and data loggers were installed in TIPs (440N/380E and 380N/340E) and DNAPL recovery wells (HG-37SE and HG-36SE) during the first 3 days of injections to monitor formation response.

The water-level monitoring during the pilot test demonstrated that reagent injections temporarily pressurize the targeted treatment zones sufficient to result in potential groundwater discharge at land surface via well casings. The pressurized zones resulted in groundwater discharge via uncapped TIPs (400N/380E, 420N/345E, 460N/340E) and monitoring well HG-36SE within approximately 60 feet of the injections. Groundwater discharge was only observed during reagent injections into the UH, since all TIPs and monitoring wells in this area are screened in the UH. The pressure pulse resulting from injections into the Surficial Aquifer did not result in groundwater discharge since no Surficial Aquifer monitoring points were present in the Pilot Test area. Once well/TIP caps were securely sealed, groundwater discharge ceased. This monitoring demonstrated that increased formation pressures will necessitate the use of tight fitting caps for all TIPs and well casings prior to full-scale injections. Appendix D contains temporal plots of formation water levels during pilot-test injections.

2.4 PERFORMANCE MONITORING

The primary short-term objective of the ISGS demonstration program is to contain and stabilize free-phase DNAPLs. The principal short-term (<1 year) performance criteria for the achievement of this objective was a significant reduction in DNAPL recovery volumes in wells and TIPs completed in the former Process Area.

2.4.1 DNAPL COLLECTION PROCEDURE

It is critical that accurate DNAPL recovery volumes were documented for all TIPs and wells at the Site. The performance monitoring is dependent on establishing consistent and accurate recovery volumes in order to evaluate the reductions in recoverable DNAPL post-ISGS treatment. Prior to 2013, DNAPL recovery in monitoring wells at the Site was performed with a bailer. The issue with using a bailer is that it disturbs the DNAPL/water interface resulting in emulsification of the DNAPL within the well. The recovered DNAPL is mixed with water making it difficult to establish the recovered DNAPL volumes. Because of this issue, the method for DNAPL recovery was modified to utilize a peristaltic pump. Dedicated tubing is installed near the base of the well, such that DNAPL is preferentially recovered with little to no water. The recovered DNAPL is collected in 5-gallon buckets and allowed to settle over a period of hours. Once the water/DNAPL interface is reestablished in the bucket, the volume of DNAPL and water is recorded on field forms. The use of a peristaltic pump for DNAPL collection has been ongoing in the former Process Area since 2013. The DNAPL data volumes resulting from this recovery method is accurate and reproducible. Hence, the pre- and post-DNAPL recovery volumes are accurate representations of the effectiveness of the ISGS treatment remedy performance.

2.4.2 DNAPL RECOVERY FORMER PROCESS AREA

The UH is the only geologic unit that has consistent and sustainable DNAPL recovery. Five Surficial Aquifer DNAPL recovery wells were installed in the former Process Area in 2013, but they have failed to produce recoverable DNAPL. Conversely, the five UH DNAPL recovery wells installed in 2013 consistently recover DNAPL. Similarly, 24 of the 101 TIPs installed in the UH consistently recover DNAPL.

A biweekly DNAPL recovery program for the TIPs was started in November 2012 and has been ongoing since this time. Approximately half of the 24 TIPs with recoverable DNAPL did not start producing DNAPL until months after they were installed. A few of the TIPs were installed for over 1 year before they contained recoverable DNAPL. DNAPL recovery volumes for the TIPs range from less than 1 gallon to 22 gallons per 2 week interval.

Limited DNAPL recovery has been ongoing in the former Process Area for over 10 years at two monitoring wells (HG-11S and HG-15S). Based on the 2012 investigation of DNAPL impacts in the former Process Area, five additional DNAPL recovery wells were installed. The five wells installed in 2013 have consistently recovered DNAPL, with recovery volumes ranging from 3 to 15 gallons per 2-week interval. The only exception to 2-week intervals between recovery events was the 6-week interval from early March 2014 to late April 2014 during the pre- and post-pilot test implementation and evaluation. This resulted in increased volumes of recovered DNAPL in late April, with subsequent recovery events returning to trends of decreasing volumes of recovered DNAPL.

The area for the pilot test was selected because of the presence of TIPs and wells with significant volumes of recoverable DNAPL. The test area contains three TIPs (420N/345E, 380N/340E and 400N/380E) and one well (HG-36SE) with recoverable DNAPL. In addition, TIP (460N/340E) is located approximately 5 feet to the north of the designated pilot test area and has recoverable DNAPL.

DNAPL recovery began in the pilot test area in November 2012 with additional recovery locations added in mid- to late-2013 (Figure 2-5). Both the TIPs and recovery well had consistent DNAPL volumes collected up until the pilot-test in March/April 2014. All DNAPL recovery within the treated portion of the pilot-test area showed significant decreases in DNAPL recovery rates and volumes. TIP 380N/340E is located in the southwestern portion of the pilot test area where ISGS injections were not performed. As expected, this TIP did not show a reduction in DNAPL recovery rates.

The following is a summary of DNAPL recovery pre- and post-ISGS injections.

<u>Well HG-36SE</u>
The DNAPL recovery well HG-36SE is located on the eastern portion of the pilot test area (Figure 2-2). Prior to ISGS treatment, this well averaged approximately 15 gallons of DNAPL per recovery event (Figure 2-6a). Immediately following the ISGS injections, DNAPL recovery declined to less than 0.5 gallons per recovery event and

remained at this rate for 4 months before increasing to approximately 2 gal per recovery event. The DNAPL recovery at this well was reduced by 87 to 97 percent.

TIP 420N/345E

This TIP is located on the western side of the pilot test area (Figure 2-2). Prior to ISGS treatment, this TIP averaged approximately 22 gallons of DNAPL per recovery event (Figure 2-6b). Immediately following the ISGS injections, DNAPL recovery declined to approximately 1.5 gallons per event and remained at this rate for 3 months before increasing to approximately 4 gallons per event. The DNAPL recovery at this TIP was reduced by 82 to 93 percent.

TIP 400N/380E

This TIP is located on the eastern side of the pilot test area by DNAPL recovery well HG-36SE (Figure 2-2). Prior to ISGS treatment, this TIP averaged approximately 6 gallons of DNAPL per recovery event (Figure 2-6c). Approximately 2 months following ISGS injections, DNAPL recovery was reduced to approximately 1 gallon per event. The DNAPL recovery at this TIP was reduced by 83 percent.

TIP 460N/340E

This TIP is located approximately 5 feet outside of the northern boundary of the pilot test area (Figure 2-2). Given its location, ISGS treatment of this area was expected to be minimal. Prior to ISGS treatment, DNAPL recovery at this TIP averaged approximately 2.5 gallons per event. Immediately following the ISGS injections, DNAPL recovery increased slightly and then declined to approximately 1.5 gallon per event (Figure 2-6d). The DNAPL recovery at this TIP was reduced by 40 percent.

The post-ISGS treatment performance monitoring resulted in significant reductions in DNAPL recovery rates within the pilot test area. The three TIPs and one recovery well located within and adjacent to the pilot test area showed 40 to 97 percent reductions in DNAPL recovery. The short-term performance criteria were met for this pilot test.

2.4.3 ISGS Injections Radius of Influence

Eleven geologic cores were collected in the pilot test area from land surface to the top of the middle clay unit to evaluate the distribution of reagent and non-treated DNAPL. An attempt was made to approximately center most borehole location between injection points to evaluate the treatment radius and coverage within pilot test area. In addition, select core locations were chose to evaluate the reagent distributions at increasing distances from an individual injection point (PTC-1 and -2; PTC-4 and -5), consistent with the approved Workplan. The post-treatment cores were collected approximately 2.5 months (June 23-27, 2014) following the completion of the ISGS injections (Figure 2-7). The following was noted in the descriptions of the cores: 1) Presence/absence of reacted and non-reacted reagent; 2) Percentage of DNAPL treated; 3) PID measurements; and 4) General lithologic descriptions. The field descriptions for the logs are provided in Appendix E.

Cores were collected with a rotasonic drill rig, which employs the use of high-frequency, resonant energy to advance a core barrel and/or override casing into deposits. Core samples were collected using a 6-inch override casing and a 4-inch core barrel. Continuous cores were collected from ground surface to a targeted borehole depth of approximately 65 feet.

Post-ISGS cores were collected within the pilot test area (Figure 2-7). None of the cores contained visible bright purple non-reacted reagent indicating that the majority of the reagent was consumed. The color of the reacted reagent varied depending on the deposit it encountered. In general, the reacted reagent was dark brown to black in color. The reagent turned a bright rusty brown color when encountering iron rich deposits (upper clay unit). In some cases the reacted reagent contained a mottled silvery color within a dark black matrix. The source of this mottled coloration is unknown. The treated zones of the cores reacted with the neutralization solution when sprayed (Figure 2-8). DNAPL staining was observed throughout the cores and in contact with the reagent; however, no free-phase DNAPL was observed in the cores.

The distribution of the reacted ISGS reagent was established by rating the presence of reagent in the cores with a numerical rating of 1 to 3. A rating of 1 indicated that no reagent was present in the section of core. A rating of 2 indicated that reagent was thought to be present based on visual changes in colorations and a slight reaction to the neutralization solution. A rating of 3 indicated that reacted reagent was present in the core section and that it reacted strongly to the neutralization solution.

The numerical ratings for the presence and absence of ISGS reagent was entered into the EVS© model to establish the distribution within the pilot-test area. Results of the model analysis are presented in Figures 2-9a, 2-9b, and 2-9c. As shown in these figures, the ISGS reagent was successfully delivered to the majority of the targeted zones. Exceptions are areas where the ISGS injections were not performed or on the edge of the pilot test area.

The results of the post-ISGS core collection demonstrate that the assumed injection radius of 15 feet was conservative. In some locations reagent was encountered at distances of greater than 20 feet from injection points. Similarly, the EVS© model predicts that the reagent extended beyond the 15 feet radius. The model also predicted that reagent was delivered to the majority of the targeted areas, with minor evidence of non-treated zones within the test area.

2.5 ZONE-OF-DISCHARGE

A variance was granted by FDEP on July 18, 2008 for the injection of RemOx® EC in Florida. As part of this variance, the FDEP requires that a zone-of-discharge (ZOD) be established downgradient of the treated area. This ZOD is required to be within 150 feet of the injection area, pursuant to the 2008 variance.

The ZOD "permission by variance" was established because the ISGS reagent contains impurities that are not prime constituents of the reagents and the concentrations of the impurities are in excess of their primary groundwater standards. The COIs identified by FDEP that require monitoring in the ZOD are the following: antimony, arsenic, chromium, mercury, beryllium, cadmium, lead, thallium, selenium, molybdenum, sodium, chloride, aluminum, manganese, TDS, pH, iron, and color.

The FDEP approved the Final Underground Injection Control (UIC) Summary and Monitoring Plan for the Pre-demonstration ISGS pilot in an email dated March 21, 2013. As required by the permit, UIC compliance wells and temporary off-site zone-of-discharge (ZOD) monitoring wells were established to monitor the zone-of-discharge groundwater quality. The permit states the following concerning monitoring:

"Post-injection quarterly monitoring will be conducted until the temporarily exceeded UIC parameters return to standards or site-specific background levels, whichever is less stringent, for a minimum of one year."

A total of three background and five downgradient wells (M-25A, M-25B, M-36B, HG-33S and HG-34S) were established for UIC monitoring (Figure 2-10). The background UIC monitoring wells consist of: one Surficial Aquifer well (M-14); one UH well (HG-24S) and one LH well (HG-22D). The downgradient UIC monitoring wells consist of three Surficial Aquifer (M-25A, M-25B and M-36B) and two UH monitoring wells (HG 33S and HG-34S). In addition, two Temporary ZOD monitoring wells (HG-26S and HG-26D) were established for monitoring in the event COIs are detected in the UIC wells. The permit states:

"Temporary off-site zone-of-discharge (ZOD) monitoring will be conducted for the wells listed in Table 4 if purple-colored groundwater is observed in these wells or if ISGS indicators, including purple water or UIC parameter exceedances, are observed in upgradient UIC compliance wells."

One background monitoring event was performed for all UIC monitoring wells on March 19, 2014, prior to the start of the ISGS injections. The results of the background monitoring demonstrated that a few of the COI required for monitoring by the permit already exceed Florida primary groundwater standards at the Site. The Surficial Aquifer contains three COIs that do not meet Florida groundwater cleanup target levels (GCTLs, Tables 2-5a and 2-5b): 1) Aluminum; 2) Iron; and 3) Manganese. The UH contains three COIs and two field parameters that do not meet Florida GCTLs: 1) Aluminum; 2) Iron; 3) Cadmium; 4) pH; and 5) Color.

Two quarterly sampling events have been performed following the ISGS pilot test injections. The first event was performed approximately 2 months (June 4-5, 2014) following the ISGS injections and the second was performed approximately 4.5 months (August 17-19, 2014) following injections (Tables 2-5a and 2-5b). No purple-colored groundwater was observed. The results of the sampling indicated that some COI concentrations may be increasing in select UIC wells. The COIs with potentially increasing concentrations in the Surficial Aquifer are the following: Al, As, Cl, Fe, Mn, Na and TDS. Similarly, COIs with potentially increasing concentrations in UH are Al, Cl, Fe, Mn and Na. The following is a brief discussion of these COIs.

Aluminum

It is not clear that the Al concentrations are increasing in either the Surficial or UH monitoring wells. The concentration trends based on two post-ISGS sampling events are variable and inconsistent between total and dissolved concentrations.

The Surficial Aquifer total Al concentration may have increased in monitoring well M-25B; however, the dissolved concentrations for this well remained the same or declined. Similarly, adjacent monitoring well M-25A total Al concentrations decreased since the ISGS injections.

The UH total Al concentrations may show an increase in monitoring well HG-34S; however, the dissolved concentrations are more variable. Conversely, monitoring well HG-33S showed a decrease in concentration. Therefore, an increase in Al concentrations for both the Surficial and UH is suspect.

Arsenic

The Surficial Aquifer As concentrations in M-36B and M-25A show a clear increasing trend post-ISGS injections. The concentration increase for M-36B is the most significant with total As concentrations increasing from less than 1 to 1,570 µg/L in the first quarterly sampling event. The total As concentration declined to 663 µg/L during the second quarter event. The As concentration in M-25A increased from 1.2 to 6.3 µg/L and monitoring well M-25B, showed a decrease in concentration. The UH did not show an increasing As concentration trend for either of the UIC wells.

The Surficial Aquifer As concentrations have been historically elevated in this area since monitoring started at the Site. The post-ISGS increase in As concentrations for this area is likely due to the fluid pressure pulse developed during the injections redistributing As-impacted groundwater in this area.

Chloride

The chloride concentrations at this Site do not exceed Florida GCTLs (250,000 µg/L); however, there appears to be a slight increase in concentration post ISGS injections for Surficial Aquifer monitoring wells M-25A and M-36B. The only UH monitoring well with a potentially increasing concentration is HG-34S; however, the Cl concentrations data are highly variable and an increasing concentration trend is not clear.

Iron

The Fe concentrations appear to have increased in Surficial Aquifer monitoring wells M-25A and M-36B. Total Fe concentrations increased from 265 to 3,900 µg/L in M-25A and from 909 to 1,660 µg/L in M-36B. The post-ISGS Fe concentrations in M-25B essentially remained the same.

The Fe concentration in HG-34S increased from 18 to 317 µg/L; however, monitoring well HG-33S did not show an increasing trend.

Manganese

The Mn concentration in Surficial Aquifer monitoring well M-25A increased from 0.5 to 12 µg/L. Monitoring wells M-25B and M-36B did not show any apparent increases in concentrations.

The only UH monitoring well with a potential increase in Mn concentration was HG-34S. The total Mn concentration in this well increased from 0.6 to 12 µg/L. Both the Surficial and UH Mn concentrations are well below Florida GCTLs (50 µg/L).

Sodium

The Na concentrations increased on Surficial Aquifer monitoring wells M-25A and M-36B and decreased in M-25B. The Na concentrations increased from 1,610 to 4,510 µg/L in M-25A and from 6,740 to 33,000 µg/L in M-36B.

The Na concentration trend for the UH is not clear. The post-ISGS concentration trends for HG-34S is highly variable, with the first quarter Na concentrations decreasing and the second quarter concentrations increasing above the background concentration. The pre and post-ISGS concentration for HG-33S remained essentially the same.

Total Dissolved Solids

The TDS concentration trends for the Surficial Aquifer may have increased slightly from pre- to post-ISGS injections; however, a trend is not clear from the data. Similarly, the concentrations for the UH monitoring wells do not show a clear increasing trend.

Lithium

Lithium was not detected in any monitoring wells post-ISGS pilot test. The absence of lithium in the monitoring wells downgradient of the pilot test area supports the conclusion that changes in constituent concentrations at a few monitoring wells is not due to the dissolution of ISGS reagent. Rather, the injection pressure pulse resulting from the ISGS treatment temporarily redistributed impacted groundwater.

Summary

In summary, the UIC monitoring well concentrations for the Surficial Aquifer showed an increase in concentrations for select COIs. The COIs with apparent increases in concentrations are As, Fe, Mn and Na. The increase in As concentrations is likely due to a redistribution of As-impacted groundwater. The UH monitoring wells do not show a clear increase in concentrations; however, select COIs may have increased slightly. As per the requirement in the permit, the Temporary ZOD monitoring wells will be sampled starting 4th quarter 2014.

3.0 PRE-FINAL FULL-SCALE REMEDIATION DESIGN

The Workplan describes the phased approach to the full-scale ISGS implementation and performance monitoring for the former Process Area. This section provides additional details for the full-scale design and implementation based on the results of the pilot test. The Workplan also details the required performance monitoring for full-scale implementation; Section 3.3 includes a brief discussion of performance monitoring.

The full-scale implementation will follow the same procedures and approaches as documented in the pre-demonstration pilot test performed in 2014. The major changes to this approach will be those needed to scale-up the reagent mixing and the number of simultaneous injection points to achieve higher production rates.

The primary objective of the former Process Area ISGS pilot-test injections was to determine the effectiveness of ISGS reagent performance and injection methods in order to more effectively implement the full-scale ISGS remedy. The results and lessons learned were used to design the full-scale remediation and streamline field implementation.

3.1 PILOT-TEST LESSONS LEARNED

The following is a summary of lessons learned during the 2014 pilot test:

- A 15-foot ROI for the ISGS reagent injections is conservative for both the Surficial and UH; the reagent was successfully delivered to the targeted intervals with approximately 20-foot spacing between injection points;
- The injection tool design was effective for targeting 2-foot intervals. Full-scale injections will utilize two or more Geoprobe rigs with up to two simultaneous injection points per rig. A separate diaphragm pump will be used to inject into each of the points.
- Flow meters were not effective at monitoring injected reagent volumes. The meters failed due to abrasion and plugging after a few hundred gallons were injected. The most effective method for monitoring injected reagent volumes was to manually monitor and record tank volumes during reagent injections;
- The reagent mixing process was effective. A temporary structure will be erected on-Site to accommodate mixing for full-scale implementation;
- A cement/bentonite grout is effective at sealing the borehole after injection. Grouting of the borehole through the ISGS reagent injection string via a knockout plug at base of the tool was successfully tested and will be used for full-scale implementation;

- The potential for short circuiting (i.e., daylighting) of ISGS reagent exists for wells, TIPs, and infrastructure foundations and pathways. All TIPs and monitoring wells will be capped prior to full-scale injections to prevent short-circuiting of groundwater and reagent via these pathways. In addition, containment and neutralization solution will be used in the event of reagent daylighting during injections.

3.2 FULL-SCALE DESIGN

The Phase I characterization and subsequent EVS© model were used to identify the distribution of DNAPL impacts to be targeted for full-scale remediation (Figure 3-1). The pre-demonstration pilot-test results indicated that an assumed ROI of 15 feet was sufficient to provide coverage of the target area (Figures 2-9a, 2-9b, and 2-9c).

The location of the full-scale injection points was developed based on a 20-foot triangular pattern over the extent of DNAPL impacts (Figure 3-2). The extent of the injection zone spans approximately 400 feet from north to south and 380 feet from east to west. A total of 253 direct-push injection points and one TIP (380N/180E) will be used to inject ISGS reagent. TIP 380N/180E is the only TIP with a screen interval intersecting the EVS© projected DNAPL impacts and which is not currently being used for performance monitoring. Direct-push injections within the pilot-test area will only be performed in areas not previously treated during the pilot test. The need for additional hot-spot treatment in the pilot test area will be determined after the full-scale implementation and short-term performance monitoring.

The EVS© model generated during the Phase I characterization was used to identify intervals with DNAPL impacts to be targeted during full-scale remediation (Figure 3-1). The target interval depths range from 3.5 feet bgs to 66.5 feet bgs. Cross sections were developed to show slices through targeted DNAPL impacted areas and the conceptualized ISGS reagent distributions (Figures 3-2a through 3-2d). The injection point grid is based on a triangular injection pattern; therefore, the 2-dimensional cross sections do not show the treatment areas from injection points that fall just outside of the line of section. As a result, injection points on either side of the lines of sections were projected onto the cross section to visually show the complete treatment of the projected DNAPL impacts shown in the cross sections.

The full-scale ISGS injection points were developed based on a uniform triangular grid pattern across the entire former Process Area. Injection grid points that were in areas with no DNAPL impacts were removed from the grid. There were a few areas where the conceptualized ROI did not capture all projected DNAPL impacts. In order to help ensure that these impacted areas were treated, additional injection points were manually added to the grid to address these areas. Therefore, the initially uniform triangular grid was optimized to: 1) Eliminate injection point locations that were outside of DNAPL impacted areas; and 2) Add new injection points to address areas where the assumed ROI was insufficient to capture all impacts in these areas.

Cross-section D-D' is oriented east to west across the northern area of the former Process Area (Figure 3-2) and shows both DNAPL impacts and proposed targeted ISGS treatment zones (Figure 3-3a). The Surficial Aquifer DNAPL impacts are primarily concentrated immediately above the upper clay unit. The UH DNAPL impacts are primarily concentrated in a zone approximately 10 to 20 feet above the middle clay unit; however, there are a few areas along this line of section where DNAPL impacts extend to the top of the middle clay unit. Included on this cross-section is the projected distribution of ISGS reagent in the pilot test area. The zones within the pilot test area that were previously treated will not be re-treated during the full-scale implementation; however, there are a few residual zones within the pilot test area that were not treated. Injection points are included in the full-scale implementation (Figure 3-2) to address the remaining DNAPL-impacts within pilot test area.

Cross-section E-E' is oriented east to west across the southern area of the former Process Area (Figure 3-2) and shows both DNAPL impacts and proposed targeted ISGS treatment zones (Figure 3-3b). The Surficial Aquifer DNAPL impacts are primarily concentrated immediately above the upper clay unit and extend across the majority of the cross section. DNAPL impacts in the central area of the former Process Area extend to within 5 feet of land surface. The UH DNAPL impacts are concentrated in the central area of the former Process Area and extend from the upper clay unit to a zone approximately 10 to 20 feet above the middle clay unit. There are no DNAPL impacts that extend to the top of the middle clay unit along this line of section. Treatment in this area of the Site will be more extensive in the central area than in the eastern or western areas.

Cross-section F-F' is oriented north to south across the western area of the former Process Area (Figure 3-2) and shows both DNAPL impacts and proposed targeted ISGS treatment zones (Figure 3-3c). The Surficial Aquifer DNAPL impacts extend from approximately 5 feet below land surface to the top of the upper clay unit. The Surficial Aquifer impacts extend across the majority of the cross section. The UH DNAPL impacts are concentrated in the southern and central areas of the former Process Area and extend from the upper clay unit to a zone approximately 10 to 20 feet above the middle clay unit. There are no DNAPL impacts that extend to the top of the middle clay unit along this line of section. The majority of the targeted treatment zones are located in the southern portion of the former Process Area.

Cross-section G-G' is oriented north to south across the eastern area of the former Process Area (Figure 3-2) and shows both DNAPL impacts and proposed targeted ISGS treatment zones (Figure 3-3d). The Surficial Aquifer DNAPL impacts extend from approximately 5 feet below land surface to the top of the upper clay unit; however, Surficial Aquifer DNAPL impacts along this line of section appear to be less than in previous section. The UH DNAPL impacts extend across the entire cross section and are concentrated in a zone approximately 10 to 20 feet above the middle clay unit. There are no remaining DNAPL impacts that extend to the top of the middle clay unit along this line of section. The pilot test area had DNAPL-impacted zones that extended to the middle clay unit; however, these zones were previously treated. Similar to cross-section

D-D’, the pilot test area only contains a few new injection points to treat areas that did not receive ISGS reagent during the pilot test.

The total volume of ISGS reagent to be injected in the former Process area is 166,571 gallons. A total of 51,809 gallons will be injected into the Surficial Aquifer and 114,762 gallons will be injected into the UH. The reagent volumes for each injection point are provided in Appendix F.

The total volume of DNAPL-impacted deposits to be treated is approximately 78,500 cubic yards (CY). Approximately 24,400 CY of DNAPL-impacted deposits will be treated in the Surficial Aquifer and approximately 54,100 CY will be treated in the UH.

3.3 FULL-SCALE IMPLEMENTATION

The 253 direct-push injection points will be advanced using Geoprobe® rigs equipped with 2.25-inch diameter, 2-foot long side-port injection tools. A minimum of two drill rigs will be used for the full-scale implementation. Each rig will each be equipped with two injection pumps to allow simultaneous injection in up to four locations. One TIP (380N/180E) will be used for injecting reagent.

Some historic building foundations were encountered during the Phase I characterization, and the characterization boring locations were adjusted to work around these obstructions. For laterally extensive cement slabs, the slab will be cored and the injection point installed through the core hole. If the obstruction is not laterally extensive, the injection points will be moved from the proposed locations to a new location within proximity to the original point. During the Phase I characterization, the boring locations typically needed to be moved less than 5 feet from the original location. If the direct-push injection points are moved more than 5 feet from the original location, the distance will be evaluated to determine if additional reagent or additional injection locations are needed to treat the target zone.

Chemicals required to prepare the ISGS solution include sodium permanganate (40 percent solution) and other liquid and solid chemical reagents as part of the proprietary RemOx® EC formulation. The final ISGS reagent will be a 4.5 percent-weight solution of RemOx® EC. The ISGS solution will be mixed in separate trailers located in a temporary structure. The trailers will be equipped with appropriate means of safe chemical measuring, mixing, and transfer. A perimeter will be set up around the mixing area to prevent unauthorized workers from entering. The reagent solutions will be mixed immediately before injection and transported in 250 gallon totes to the injection locations. A LiCl tracer will be added to the ISGS reagent solution during mixing. The tracer will provide a quantitative measure of groundwater COI concentrations dilution due to ISGS reagent injections. The concentration of LiCl tracer added to the ISGS reagent will be sufficient to provide a 1,000 µg/L concentration per 250 gallon tote. Lithium is currently being analyzed to a reporting limit of 10 µg//L.

The injection tools will be advanced to the uppermost target interval, where the reagent volume of 111 gallons per 2-foot interval will be injected. The tool will be advanced to the next interval depth and so on until the lowest target interval is reached for a given injection point. In situations where an individual interval is greater than 2 feet, the tool will be advanced in multiple 2-foot steps over the interval and the specified reagent volume will be appropriately distributed along the target interval. Injection into the TIP will require a reagent volume of 444 gallons.

Based on pilot-test results, the maximum anticipated pressure to establish injection is approximately 120 psi, with an average sustained injection pressure of 40 to 80 psi. During the pilot test, the average pressure required to sustain the injection was 71 psi. Higher pressures were required to establish and maintain injections in the middle to lower sections of the UH. Lower pressures were required to establish and maintain injections in the Surficial Aquifer, with the lowest pressures observed in shallow injections. Similar injection pressures are anticipated for the full-scale ISGS implementation. The minimum and maximum flow rates achieved in the pilot test were 3 gpm and 14 gpm, respectively, with an average flow rate of approximately 5 to 8 gpm. Injection start and end times, pump pressures, flow rates, and injection volumes will be monitored and recorded at each injection location and targeted depth interval.

The pilot test demonstrated that some of the targeted zones will not allow for reagent injection. Several targeted injection intervals that straddled the base of the Surficial Aquifer and the top of the HG upper clay unit did not allow for reagent injection. Similarly, there were a few instances where reagent could not be injected into the base of the UH. It is anticipated that some of the targeted zones will be encountered where reagent injection will not be possible. The total volume of reagent specified for each of the individual injection points will be injected; however, the volume injected at a specific depth may vary depending on reagent refusal. When injection refusal is encountered at a targeted interval, the volume of reagent that was not injected will be injected into the next deeper zone. Similarly, when daylighting occurs at a particular injection zone, the injection will cease. The tool will then be moved to the next deeper injection interval and the volume of reagent remaining from the previous zone will be injected.

After completing injection at the lowest interval, a small amount (less than 25 gallons) of clean water will be injected to clear the hoses and drill string of reagent. The center point in the injection tool will then be removed to allow grout to be injected as the tool is withdrawn.

3.4 PERFORMANCE MONITORING

Performance monitoring is discussed in the Workplan. It will consist of immediate-term, short-term, mid-term and long-term performance monitoring. Performance monitoring will begin approximately 2 weeks following the completion of full-scale treatment and will continue for up to 5 years as detailed in the Workplan. DNAPL gauging will be performed in all TIPs and monitoring/recovery wells in the former Process Area. DNAPL recovery will be performed in all TIPs and recovery wells with recoverable

DNAPL on a biweekly basis. The frequency of DNAPL recovery will be evaluated after the first 3 months and the frequency may be reduced to once every 4 weeks for select wells.

Groundwater sampling will be performed in existing UIC, ZOD and performance monitoring wells located downgradient of the ISGS treatment area (Figures 2-10 and 3-4). The proposed monitoring well sampling and frequency is discussed in the Workplan.

Post-treatment geologic cores will be collected approximately 6 months following completion of reagent injection, as discussed in the Workplan. The number and location of post-treatment cores will be determined based on a combination of pre-treatment characterization and post-treatment DNAPL recovery data. Implementation will commence upon EPA approval of the proposed cores.

Aquifer testing will be performed to evaluate reduction in permeability approximately 6 to 9 months following full-scale implementation. The Workplan describes the approach to post ISGS testing. A multiple well pumping test will be performed at Surficial Aquifer recovery well M-40BE, with monitoring in observation wells PW-1 and OW-1. Slug tests will be performed in the same Surficial Aquifer and UH recovery wells tested prior to the ISGS injections and described in Section 2.2 of this report.

3.5 ZONE-OF-DISCHARGE

As discussed in Section 2.5, ZOD monitoring will occur after the full-scale demonstration ISGS injections are completed, as required by the FDEP. The monitoring wells will be as shown on Figure 3-5.

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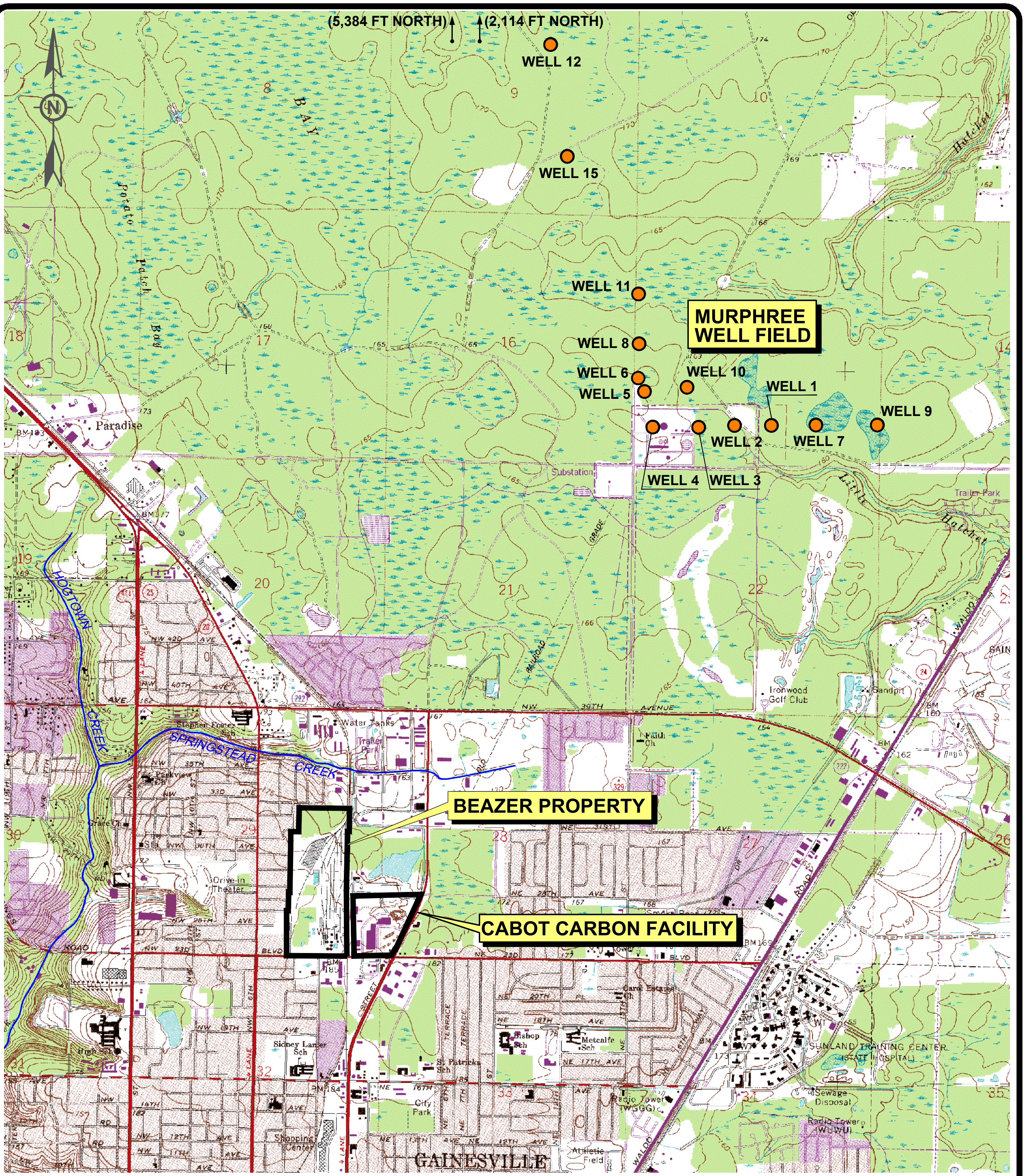
FIGURES



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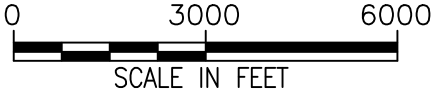

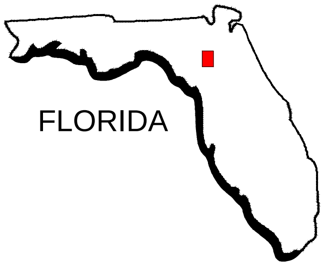

TITLE: SITE LOCATION MAP

LOCATION: Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	GC	FIGURE
DRAFTED	CP	1-1
PROJECT#	117-2201303	
DATE	10/7/13	

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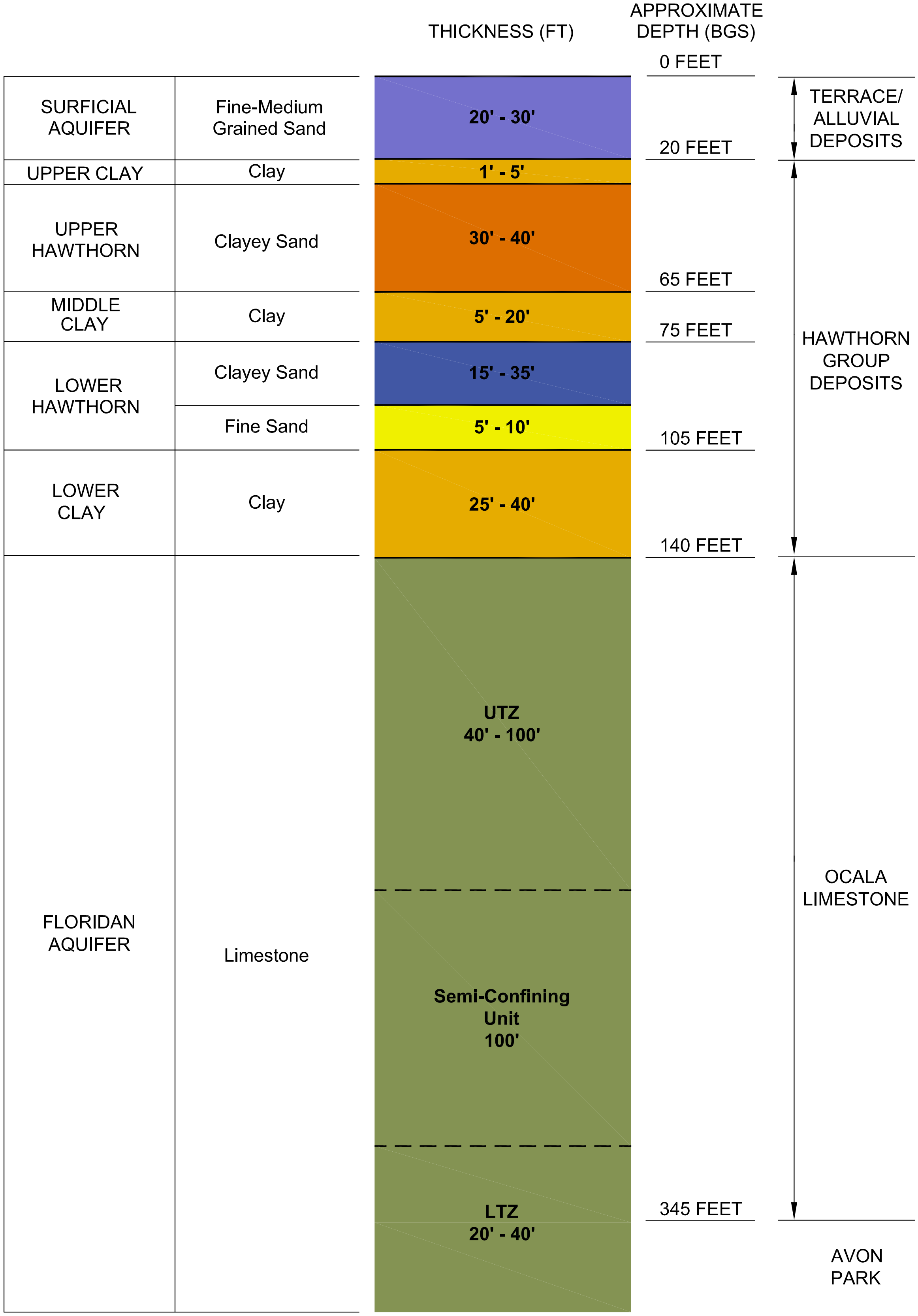

TITLE:	HYDROSTRATIGRAPHY OF DEPOSITS BENEATH SITE
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida

TETRA TECH

APPROVED	GC	FIGURE
DRAFTED	CP	1-2
PROJECT#	117-2201303	
DATE	12/9/13	

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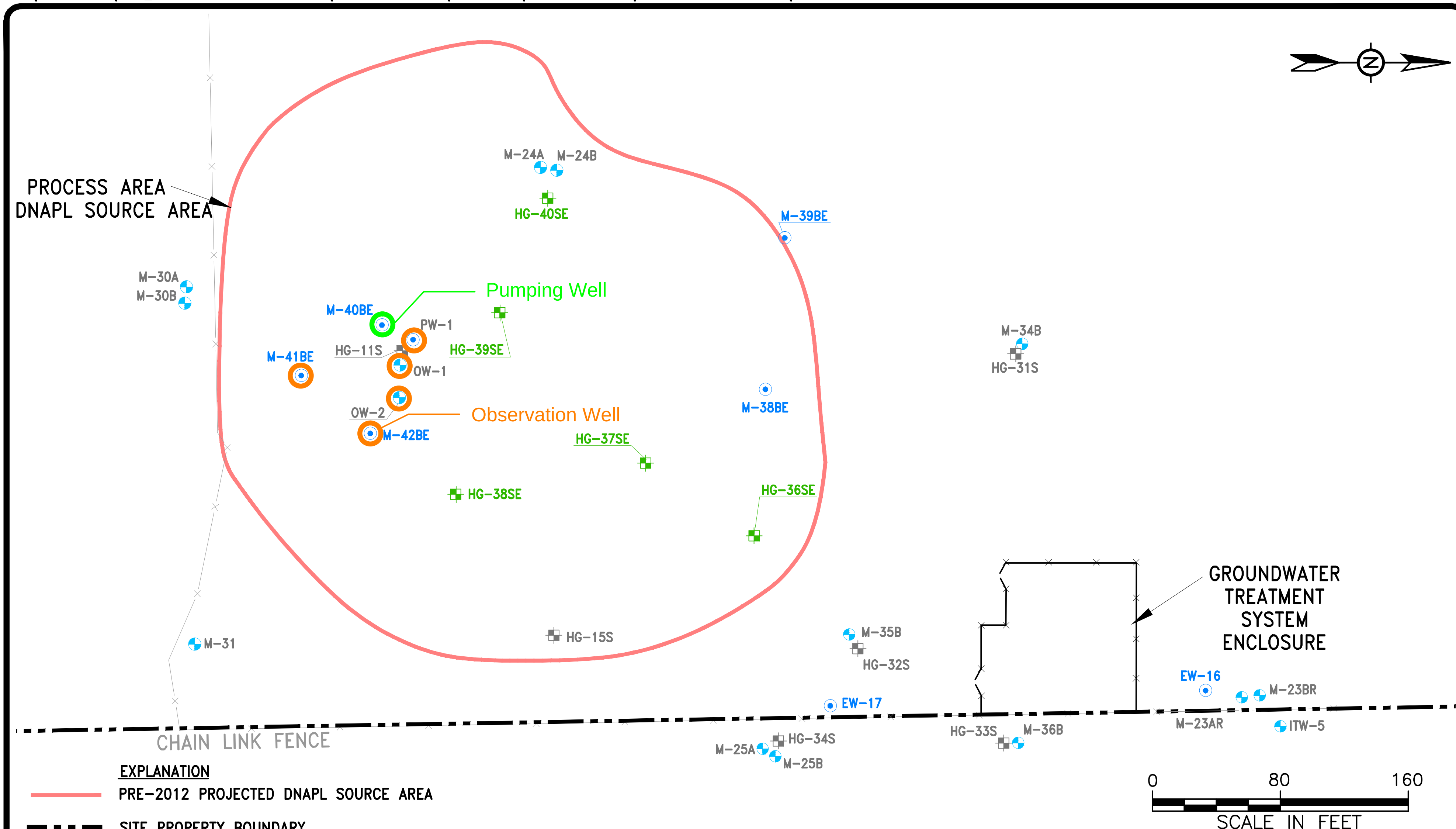

EXPLANATION

PRE-2012 PROJECTED DNAPL SOURCE AREA

SITE PROPERTY BOUNDARY

M-25A SURFICIAL AQUIFER MONITORING WELL

HG-34S UPPER HAWTHORN MONITORING WELL

M-41BE SURFICIAL AQUIFER DNAPL RECOVERY WELL

HG-37SE UPPER HAWTHORN DNAPL RECOVERY WELL

TITLE:

LOCATIONS OF PUMPING TEST WELLS

LOCATION:

Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH

CHECKED	JE	FIGURE:
DRAFTED	CP, DB, HF, ES	2-1a
PROJ. #	117-2201303	
DATE	8/4/2014	

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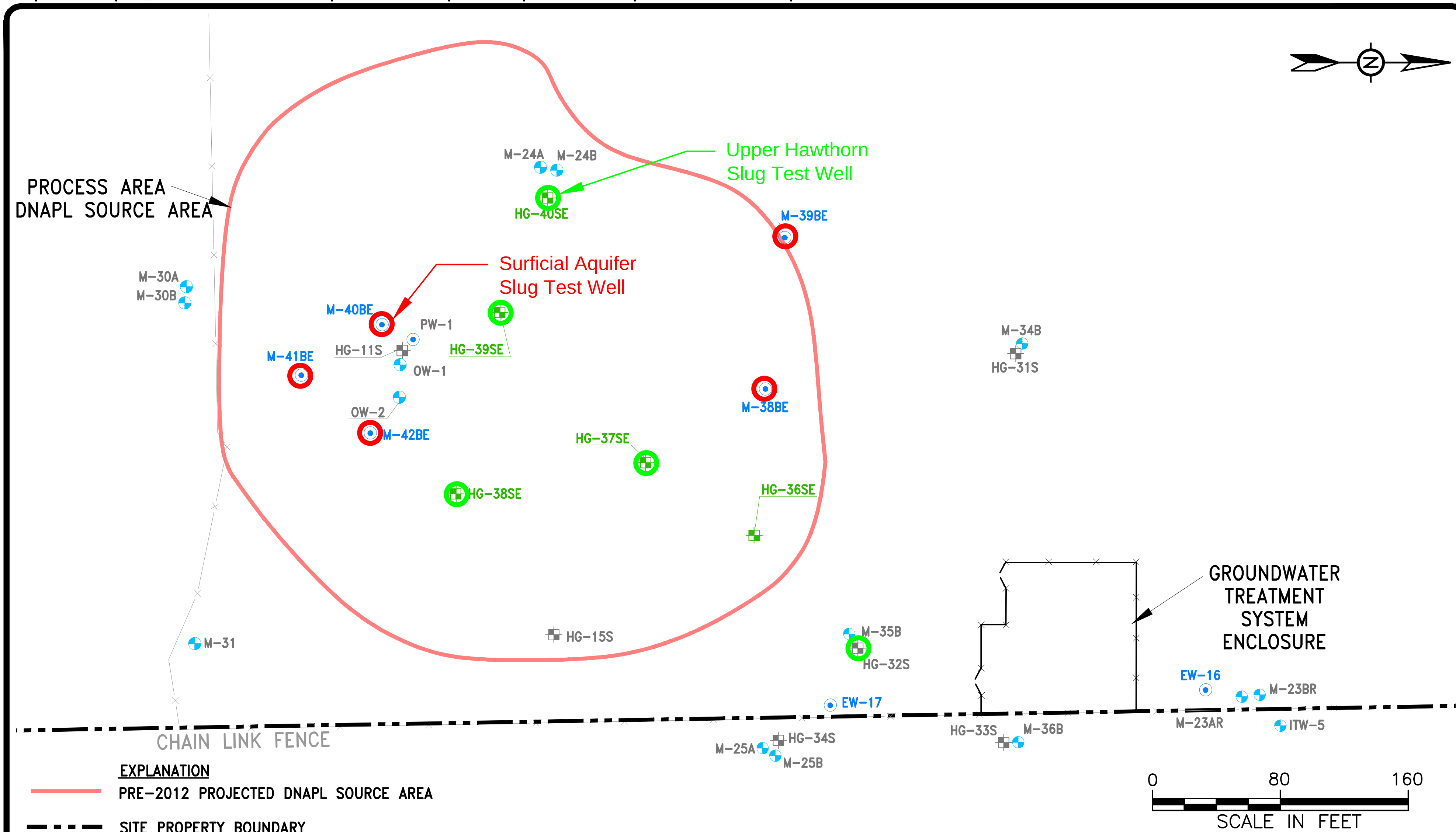

TITLE:

LOCATIONS OF SLUG TEST WELLS

LOCATION:

Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH

CHECKED	JE
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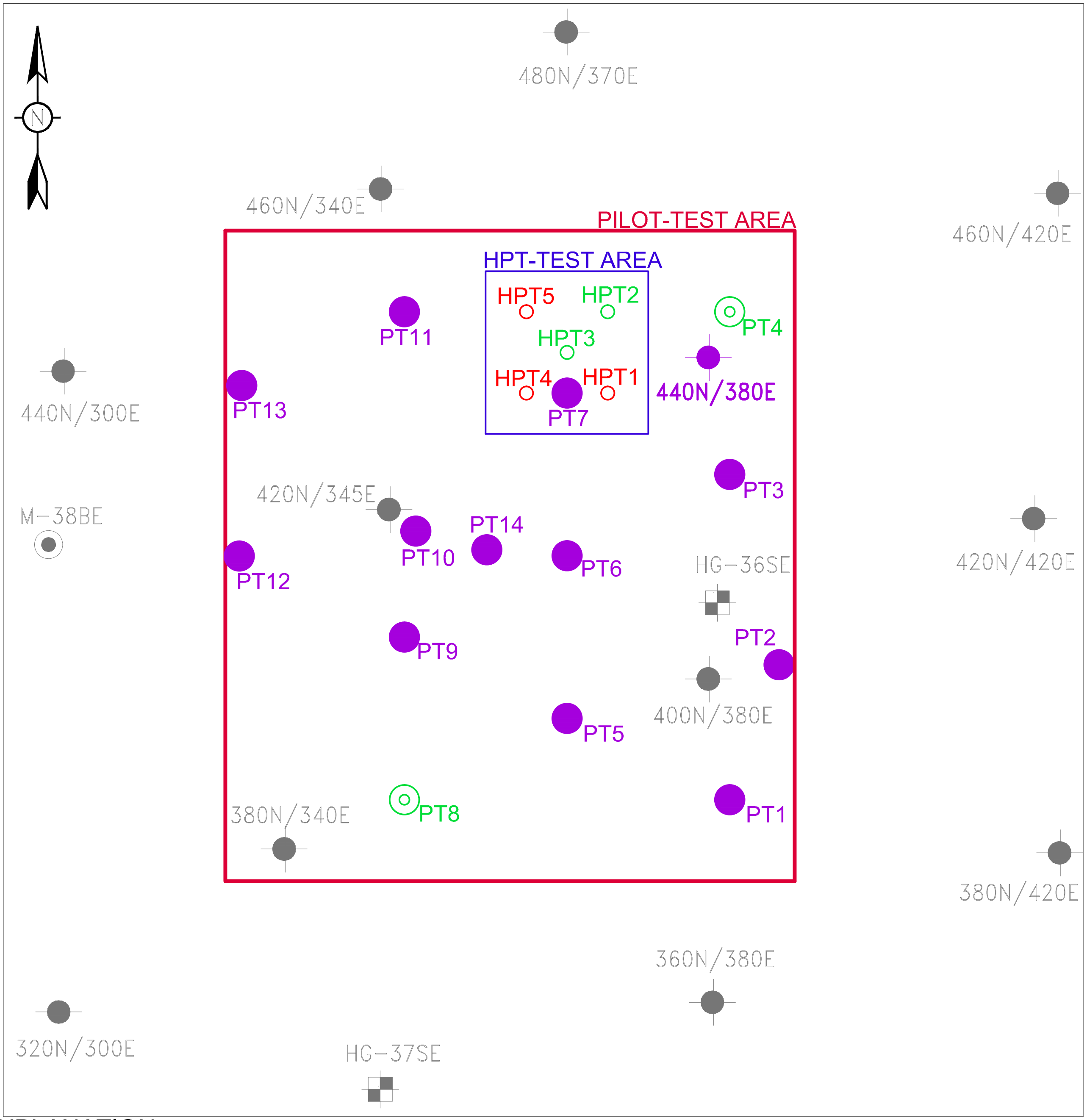
PROJ. #	117-2201303
DATE	8/4/2014

FIGURE: 2-1b



EXPLANATION

320N/300E	TEMPORARY INJECTION POINT (TIP)
M-38BE	SURFICIAL AQUIFER DNAPL RECOVERY WELL
HG-37SE	UPPER HAWTHORN DNAPL RECOVERY WELL
PT8	PROPOSED INJECTION POINT; NOT USED
PT1	DIRECT-PUSH ISGS INJECTION POINT
440N/380E	TIP ISGS INJECTION POINT
HPT1	HYDRAULIC-PROFILE TOOL (HPT) LOCATION
HPT2	PROPOSED HYDRAULIC-PROFILE TOOL (HPT) LOCATION; NOT USED

0 20 40

SCALE IN FEET

TITLE: ISGS PILOT TEST
INJECTION POINT LOCATIONS

LOCATION: Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

CHECKED	JE	FIGURE
DRAFTED	HF	2-2
PROJ. #	117-2201329	
DATE	8/4/2014	

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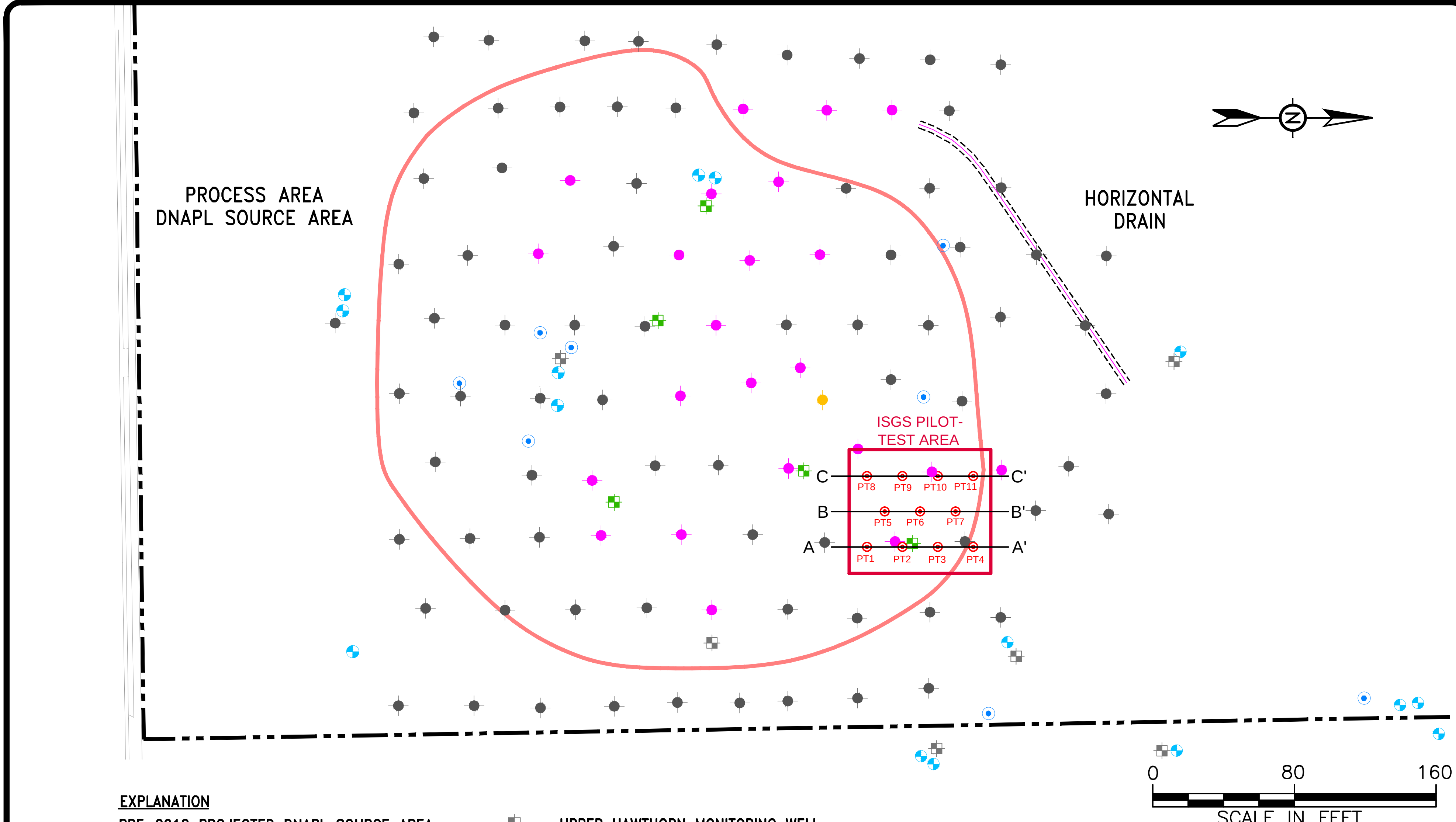


EXPLANATION

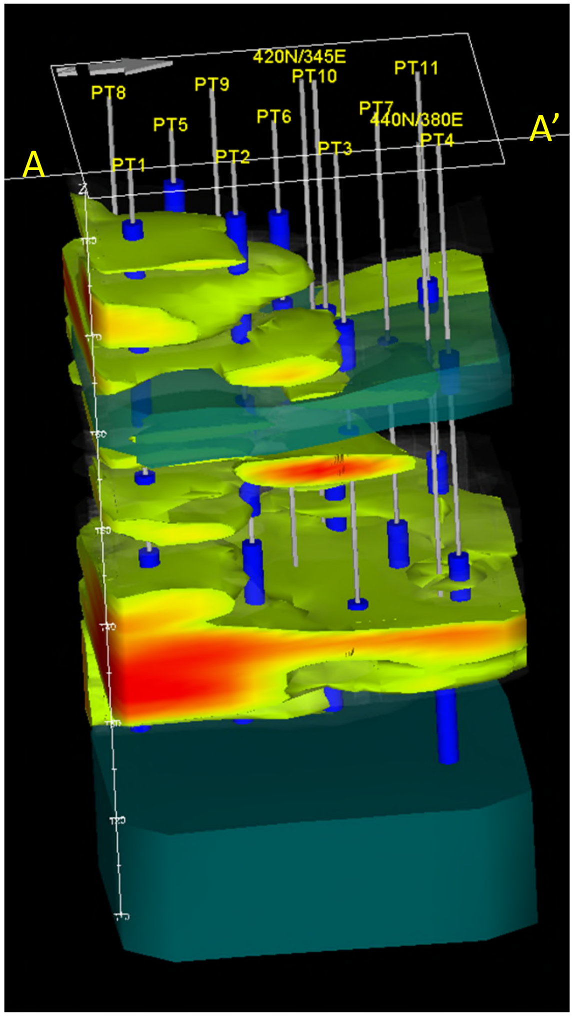
- PRE-2012 PROJECTED DNAPL SOURCE AREA
- SITE PROPERTY BOUNDARY
- SURFICIAL AQUIFER TEMPORARY INJECTION POINT
- UPPER HAWTHORN TEMPORARY INJECTION POINT
- UPPER HAWTHORN TEMPORARY INJECTION POINT WITH DNAPL REMOVAL
- SURFICIAL AQUIFER MONITORING WELL
- UPPER HAWTHORN MONITORING WELL
- SURFICIAL AQUIFER RECOVERY WELL
- UPPER HAWTHORN RECOVERY WELL
- PROPOSED GEOPROBE INJECTION LOCATION

TITLE:
CROSS-SECTION LOCATIONS FOR
ISGS PILOT-TEST AREA

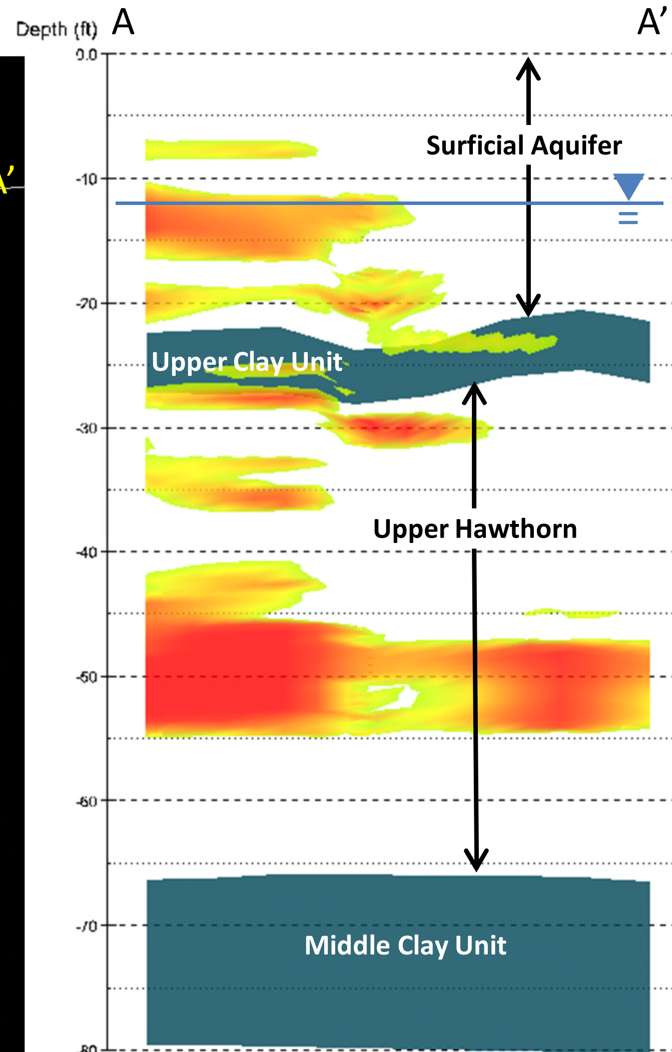
LOCATION:
Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH

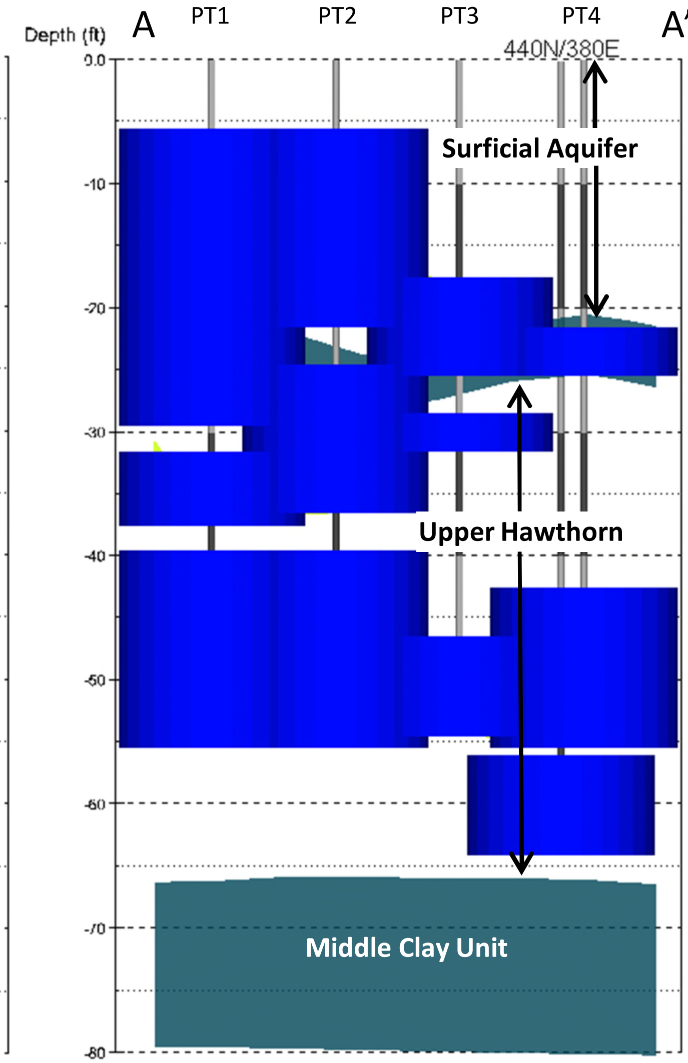
CHECKED	JE	FIGURE:
DRAFTED	LD	2-3
PROJ. #	117-2201303	
DATE	08/12/14	



1) Projected DNAPL impacts.



2) Cross-section of DNAPL impacts.



3) Targeted ISGS reagent injection intervals.

Note: injection radius shown is 15 feet.

TITLE:	PILOT-TEST CROSS-SECTION A-A’ WITH TARGETED INJECTION INTERVALS BASED ON EVS MODEL
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	MB	2-4a
PROJECT #	117-2201329	
DATE	7/23/14	

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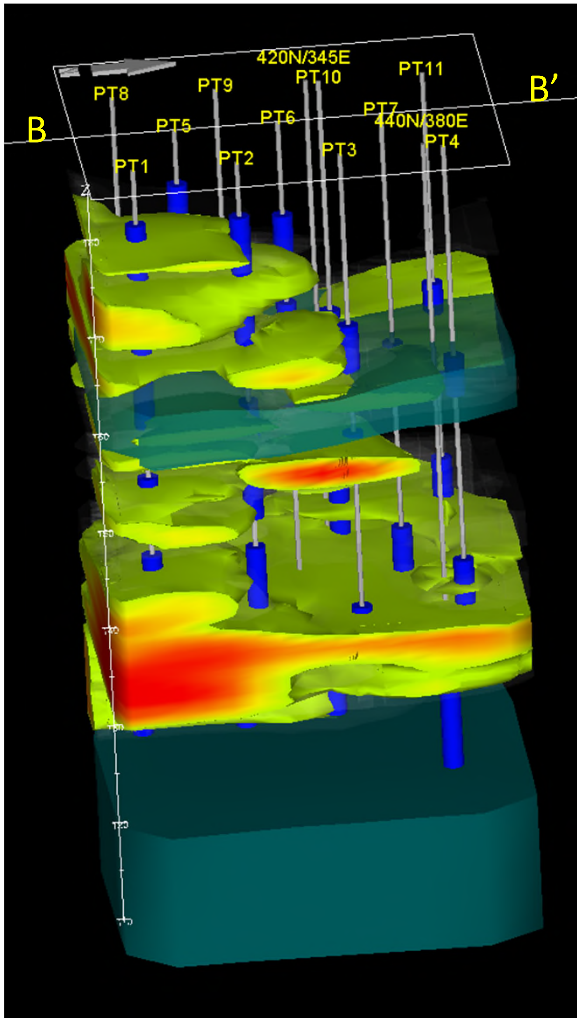
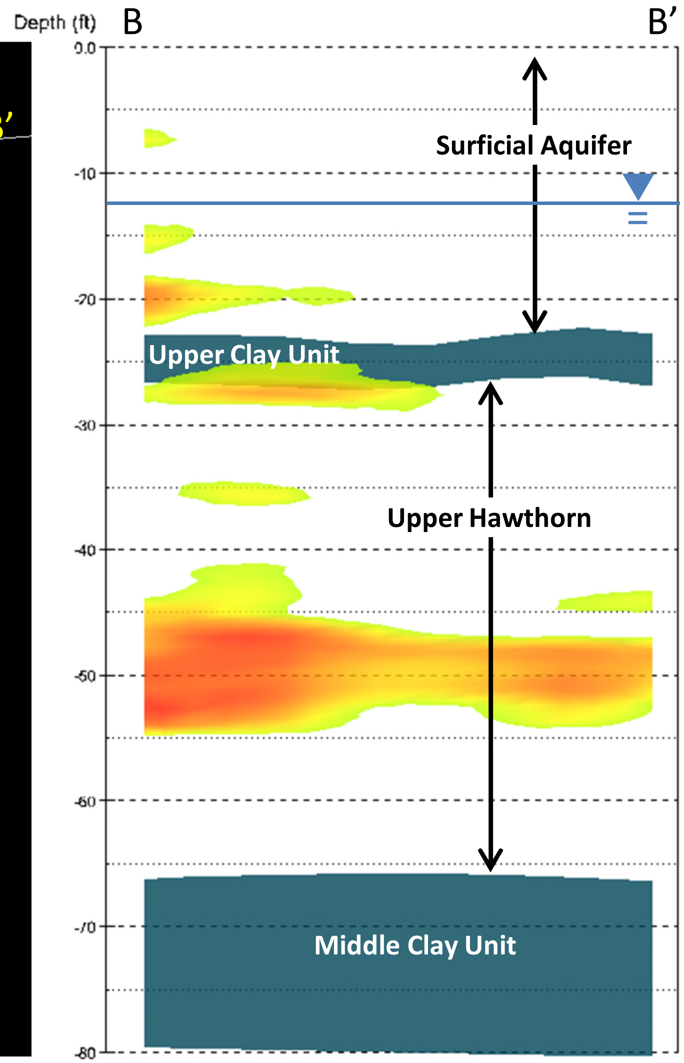
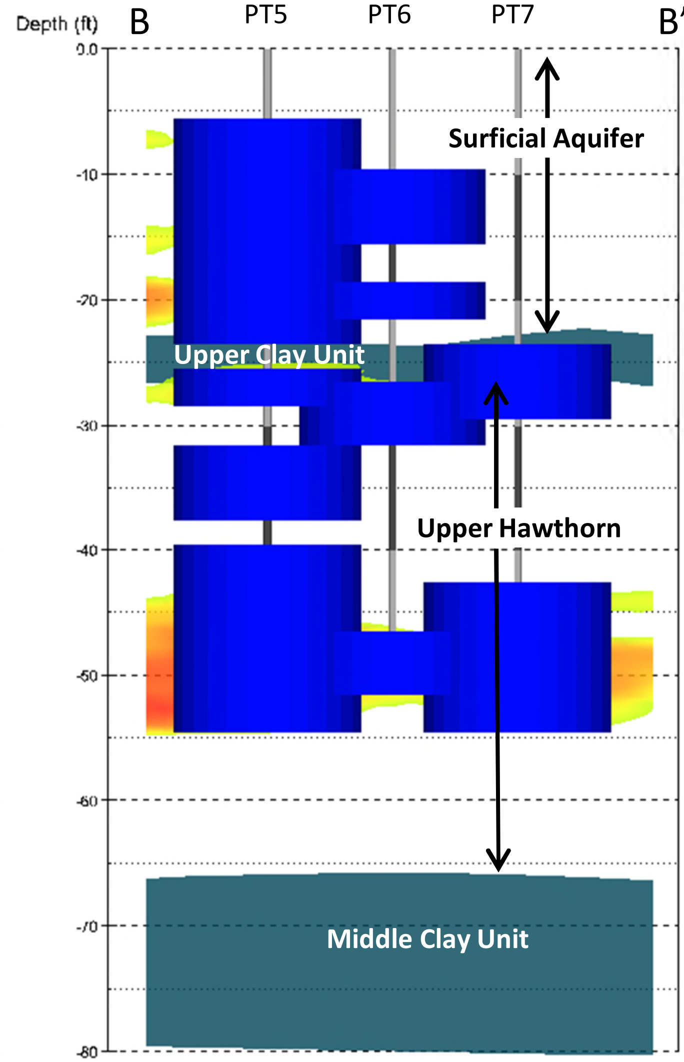


1) Projected DNAPL impacts.



2) Cross-section of DNAPL impacts.



3) Targeted ISGS reagent injection intervals.

Note: injection radius shown is 15 feet.

TITLE: **PILOT-TEST CROSS-SECTION B-B' WITH TARGETED INJECTION INTERVALS BASED ON EVS MODEL**

Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	MB	**2-4b**
PROJECT #	117-2201329	
DATE	7/23/14	

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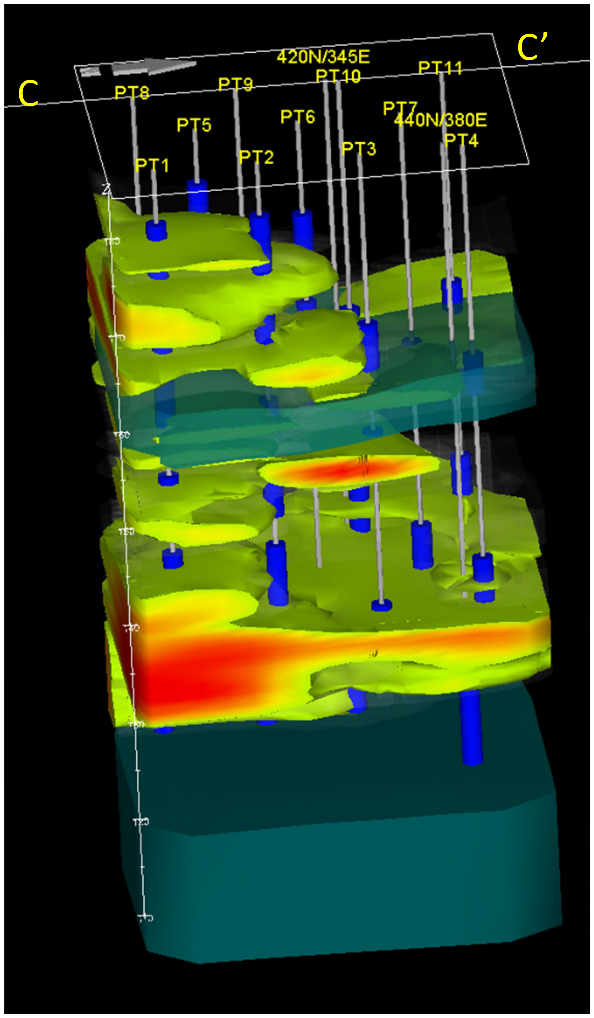
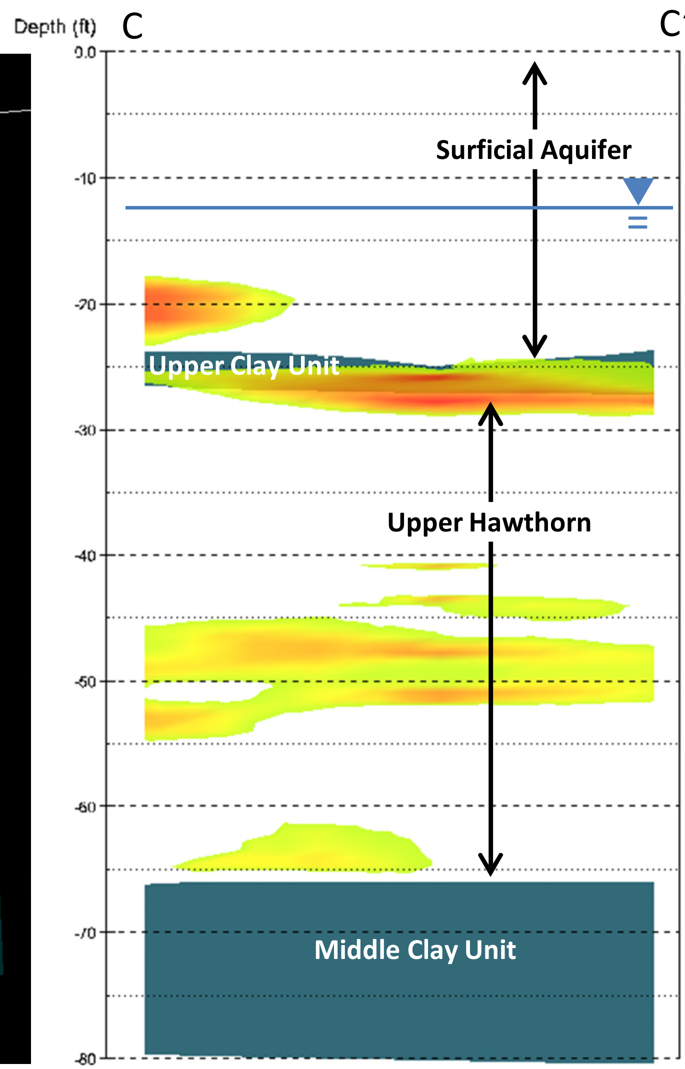
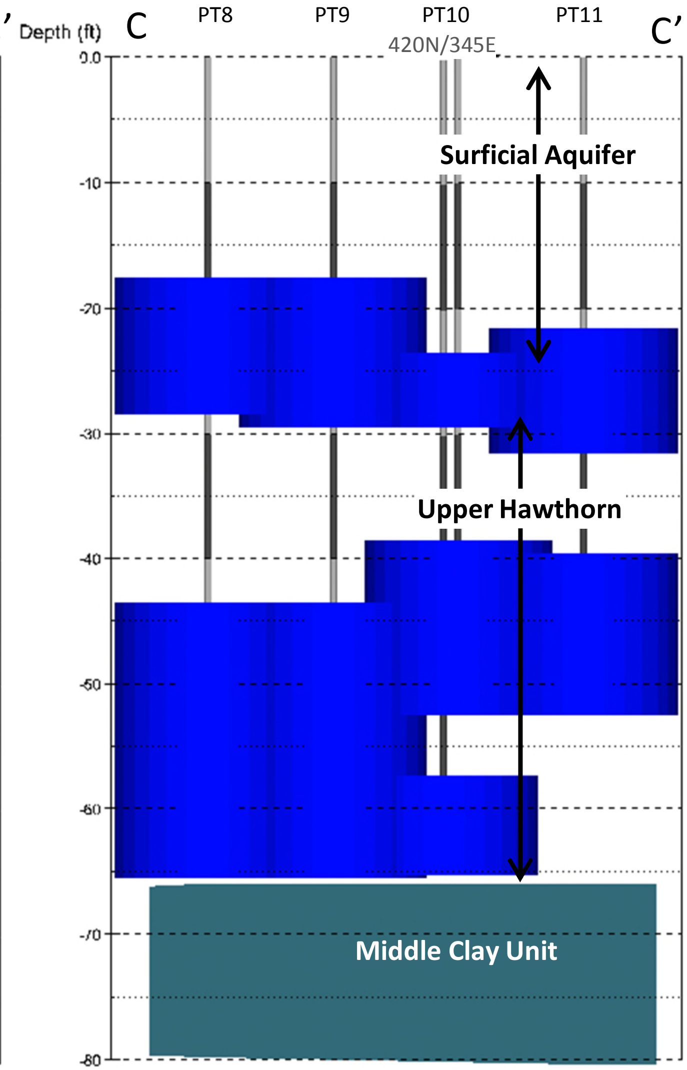


1) Projected DNAPL impacts.



2) Cross-section of DNAPL impacts.

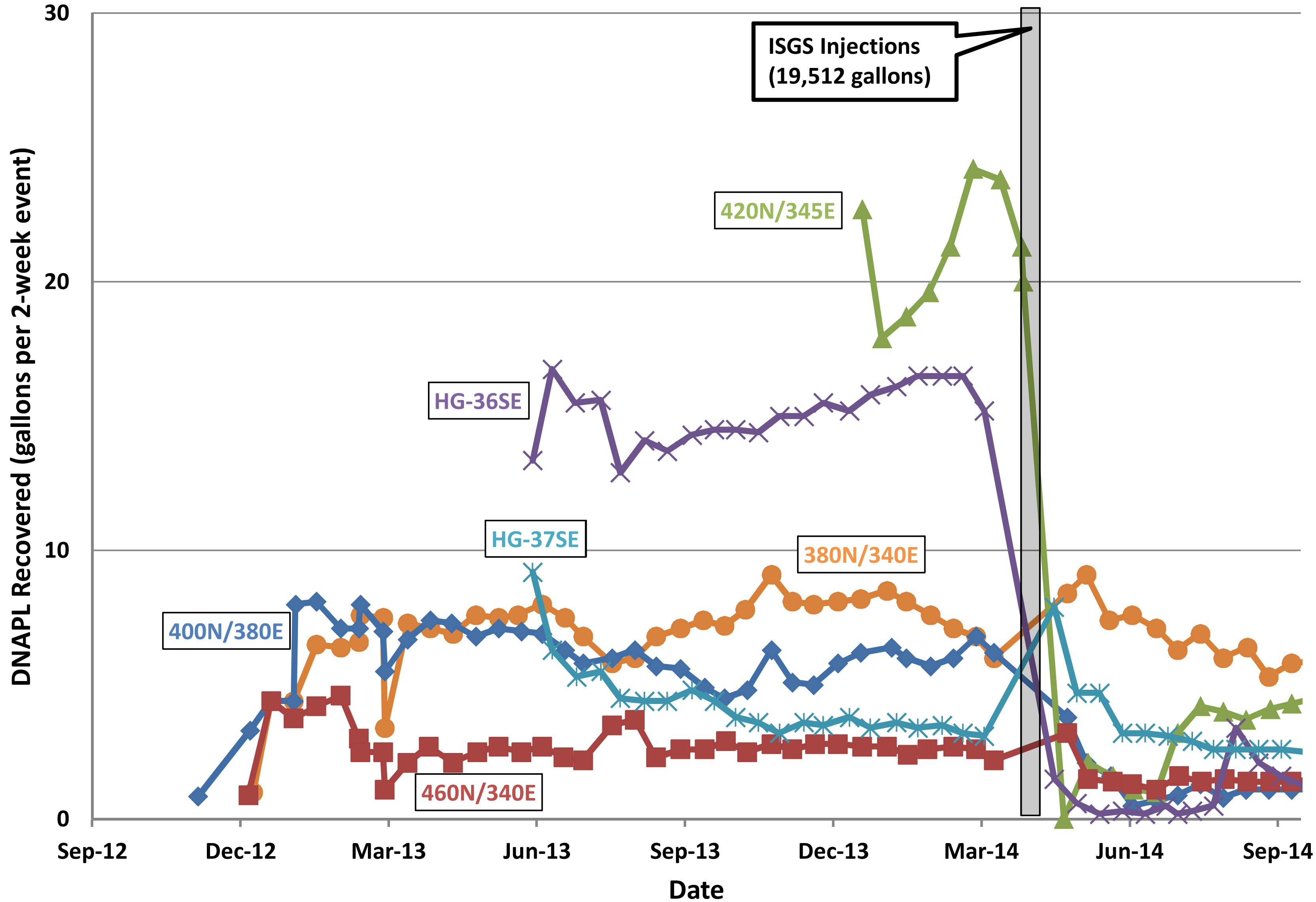


3) Targeted ISGS reagent injection intervals.

Note: injection radius shown is 15 feet.

TITLE:	PILOT-TEST CROSS-SECTION C-C' WITH TARGETED INJECTION INTERVALS BASED ON EVS MODEL		
Cabot Carbon/Koppers Superfund Site, Gainesville, Florida			
TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	MB	2-4c
	PROJECT #	117-2201329	
	DATE	7/23/14	

T:\Gainesville\ISGS_Process Area Remediation\Upper Hawthorn\Pilot Test\Report\Figures\Figure 2-4c Cross section C-C'.pptx



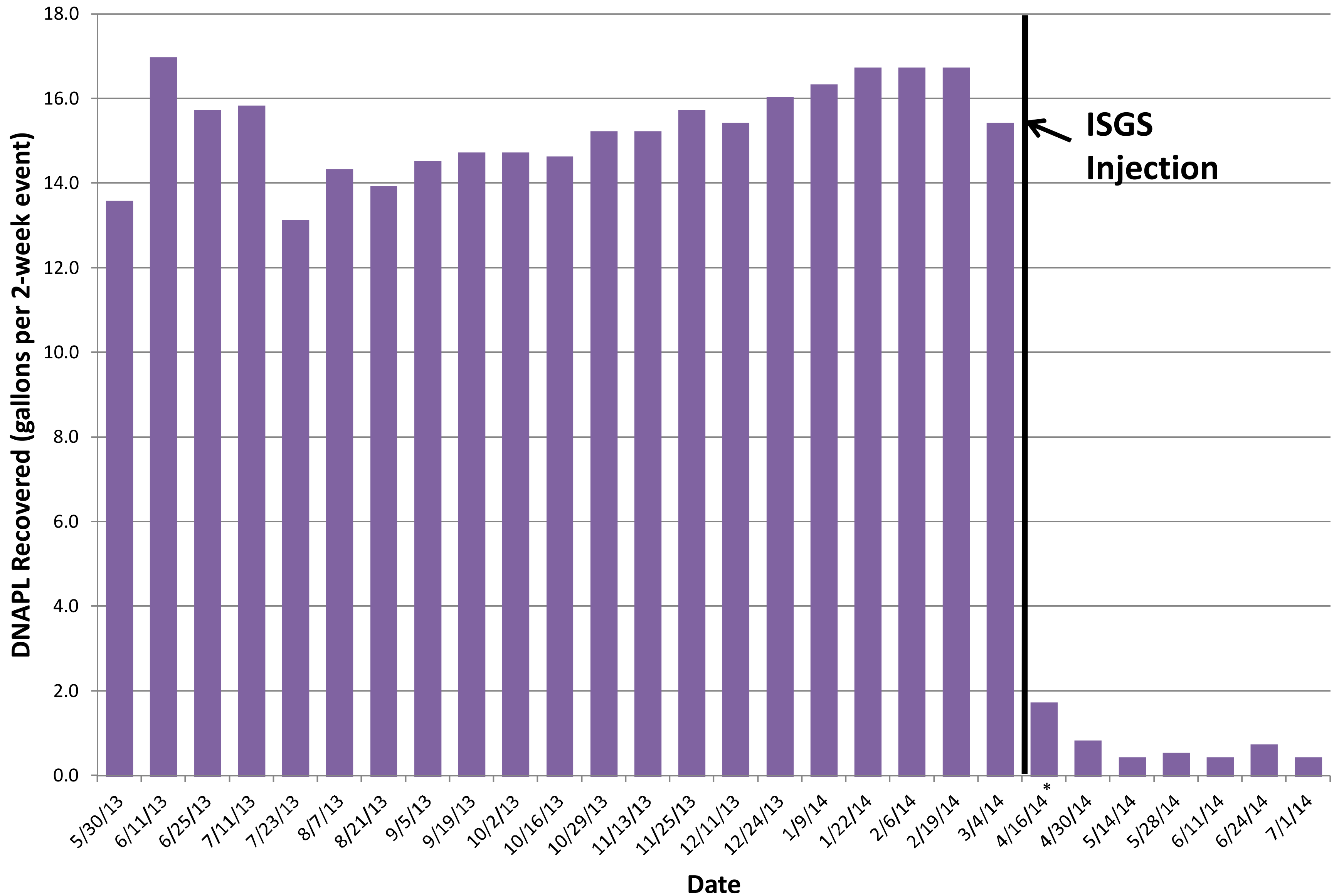
TITLE: **ISGS DNAPL RECOVERY FOR UPPER HAWTHORN WELLS AND TIPS IN AND NEAR PILOT-TEST AREA**

LOCATION: **Cabot Carbon/Koppers Superfund Site, Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE	
DRAFTED	LAD		**2-5**
PROJECT #	117-2201303		
DATE	4/2/15		

T:\Gainesville\DNAPL_Beazer\GEO_DNAPL_Recovery_Eval\Figures2-6.pptx



* 6-week interval

TITLE:	ISGS DNAPL RECOVERY FOR WELL HG-36SE
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LAD	2-6a
PROJECT #	117-2201303	
DATE	4/2/15	

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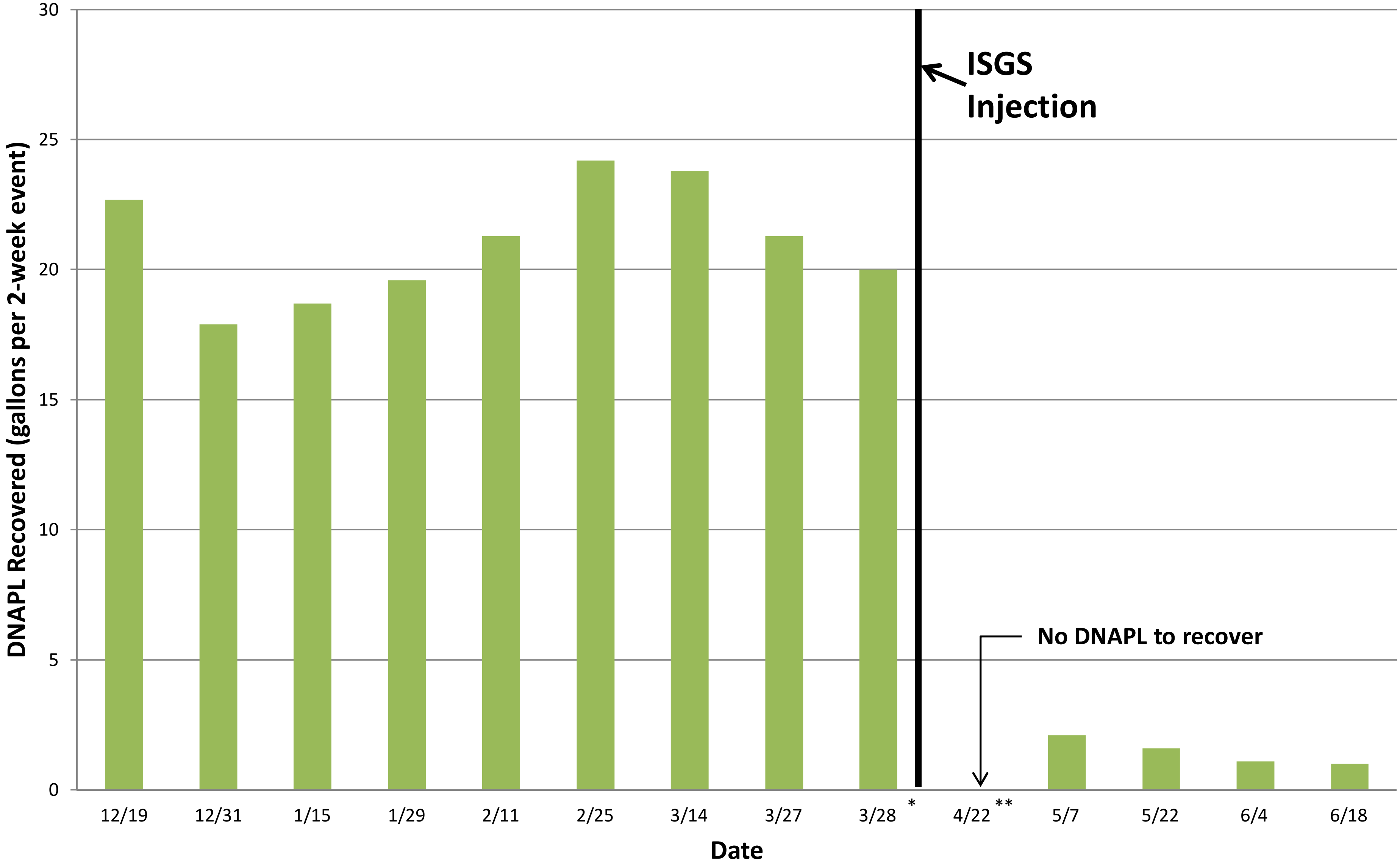


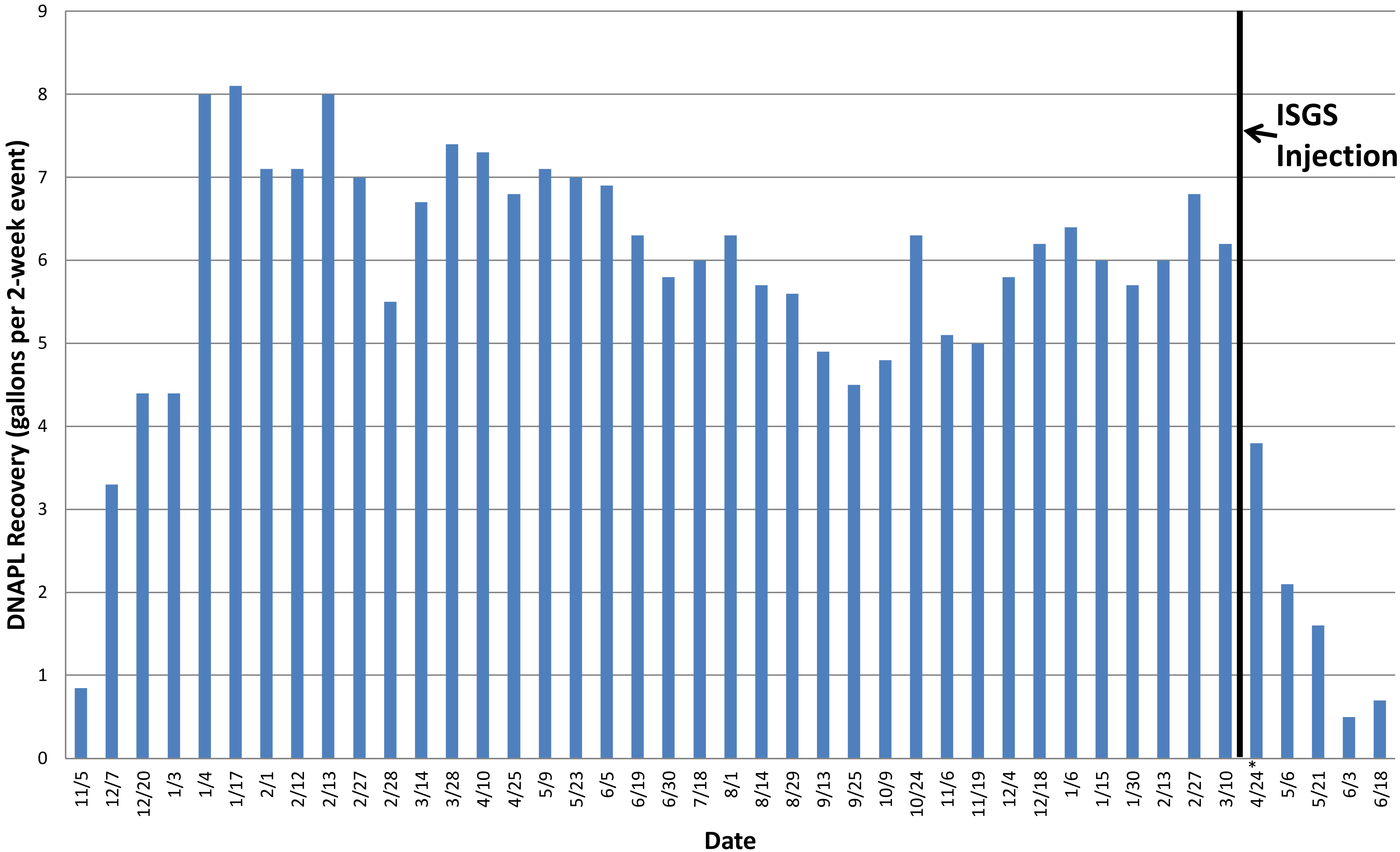
* 1-day interval
** 4-week interval

TITLE:	ISGS DNAPL RECOVERY FOR TIP 420N/345E
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LAD	**2-6b**
PROJECT #	117-2201303	
DATE	4/2/15	

T:\Gainesville\ISGS_Process Area Remediation\Upper Hawthorn\Pilot Test\Report\Figures\Figure2-5 and 2-6a through 2-6b.pptx



* 6-week interval

TITLE:	ISGS DNAPL RECOVERY FOR TIP 400N/380E
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LAD	2-6c
PROJECT #	117-2201303	
DATE	4/2/15	

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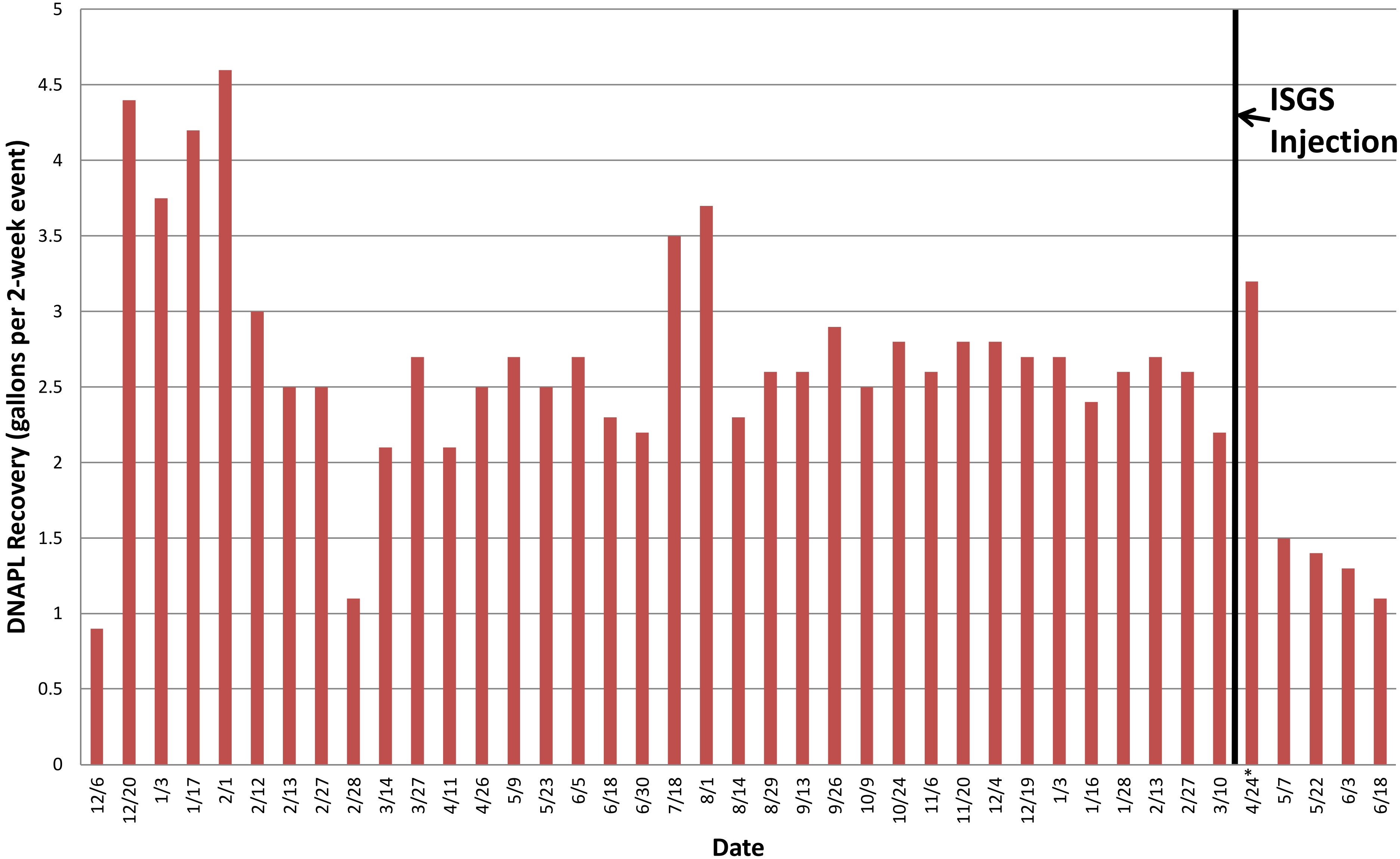
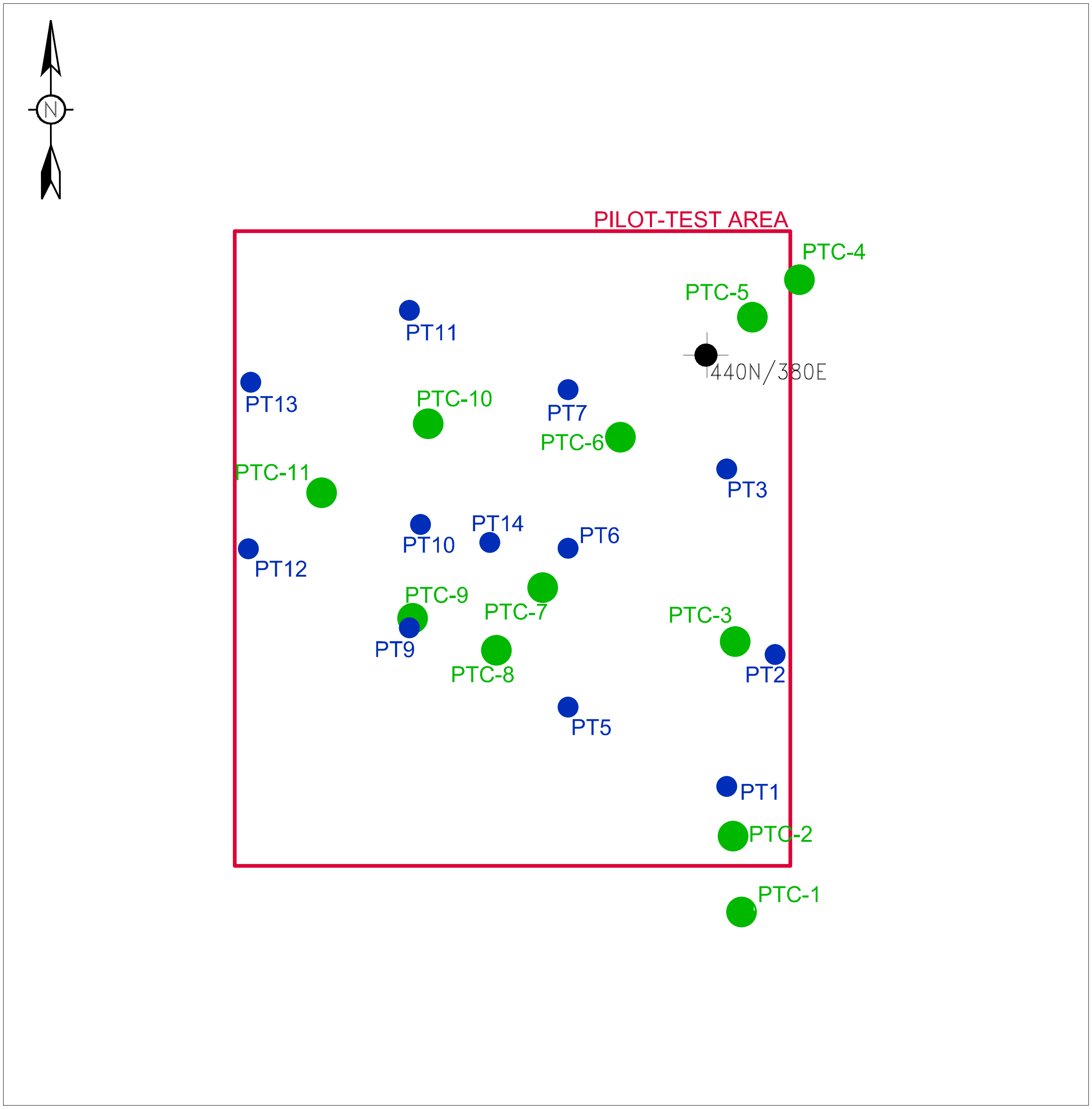


* 6-week interval

TITLE:	ISGS DNAPL RECOVERY FOR TIP 460N/340E		
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida		
TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	LAD	2-6d
	PROJECT #	117-2201303	
	DATE	4/2/15	



0 20 40
SCALE IN FEET

EXPLANATION

PT9 — PILOT TEST INJECTION POINT

PTC-8 — ROI BOREHOLE LOCATION

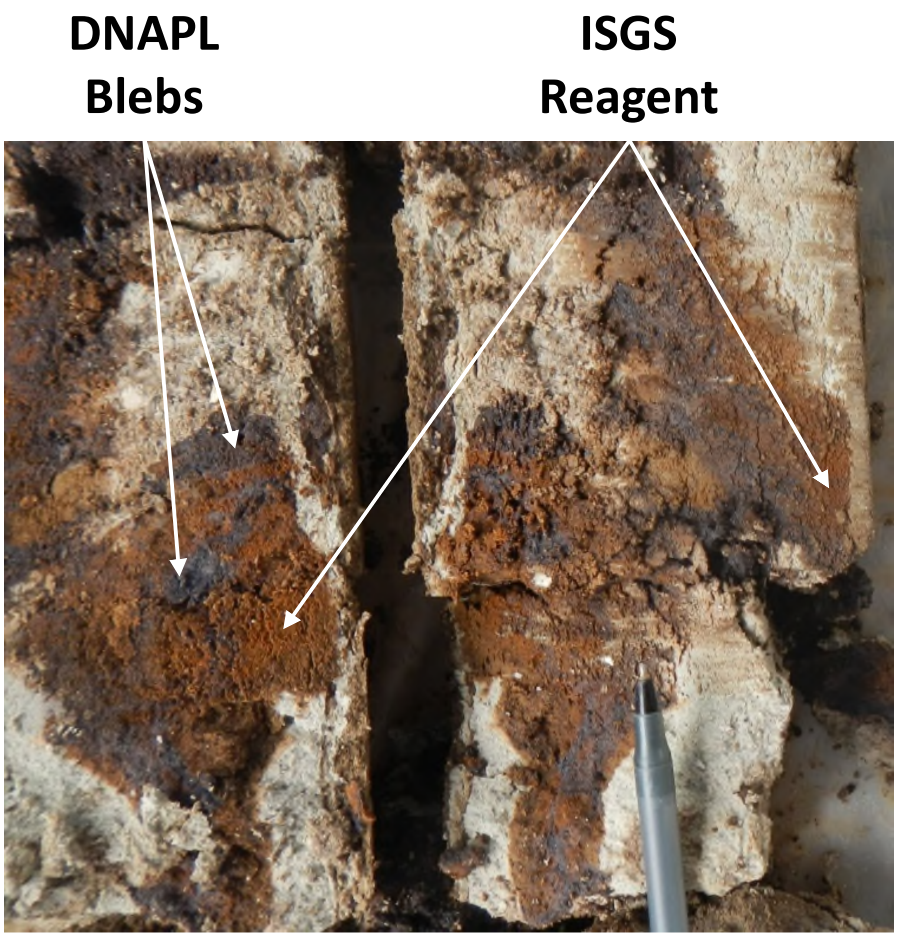
440N/380E — PILOT TEST INJECTION TIP

TITLE: ISGS PILOT TEST
POST-INJECTION CORE LOCATIONS

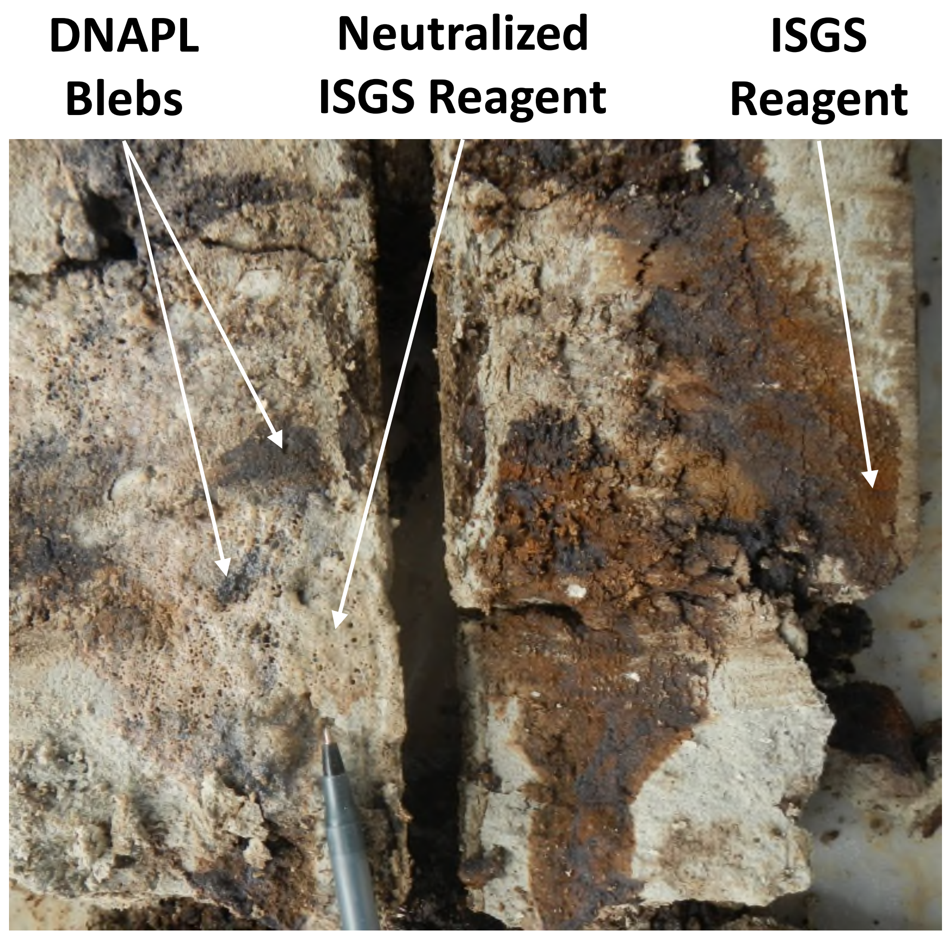
LOCATION: Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

CHECKED	JE	FIGURE
DRAFTED	HF	2-7
PROJ. #	117-2201329	
DATE	8/7/2014	



1. ISGS Reagent adjacent to and surrounding DNAPL blebs in split core.



2. DNAPL blebs in left half of core after neutralization of ISGS reagent. Unchanged right half of core.

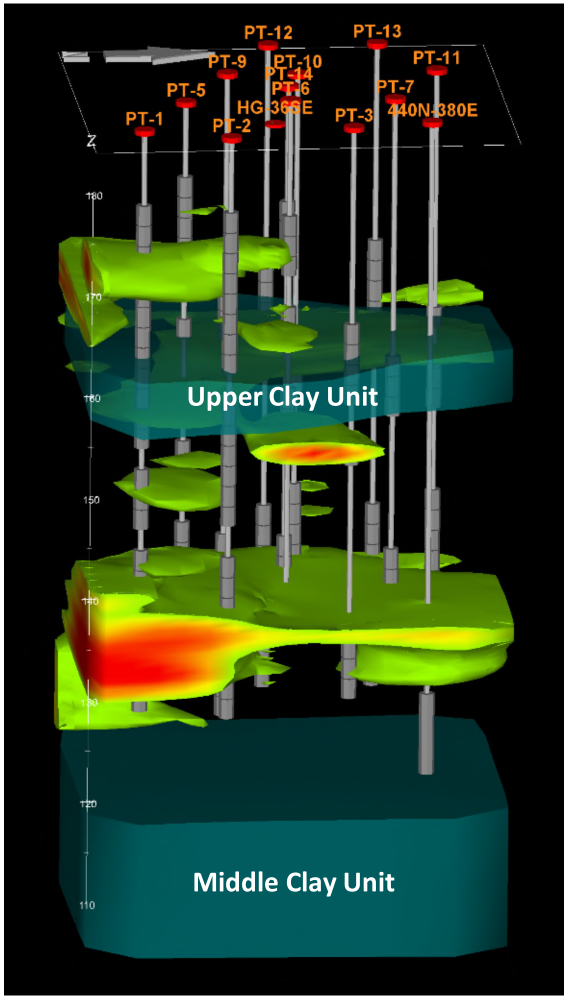
TITLE: **PHOTOGRAPHS OF POST-INJECTION TREATED CORE**

LOCATION: **Cabot Carbon/Koppers Superfund Site**
Gainesville, Florida

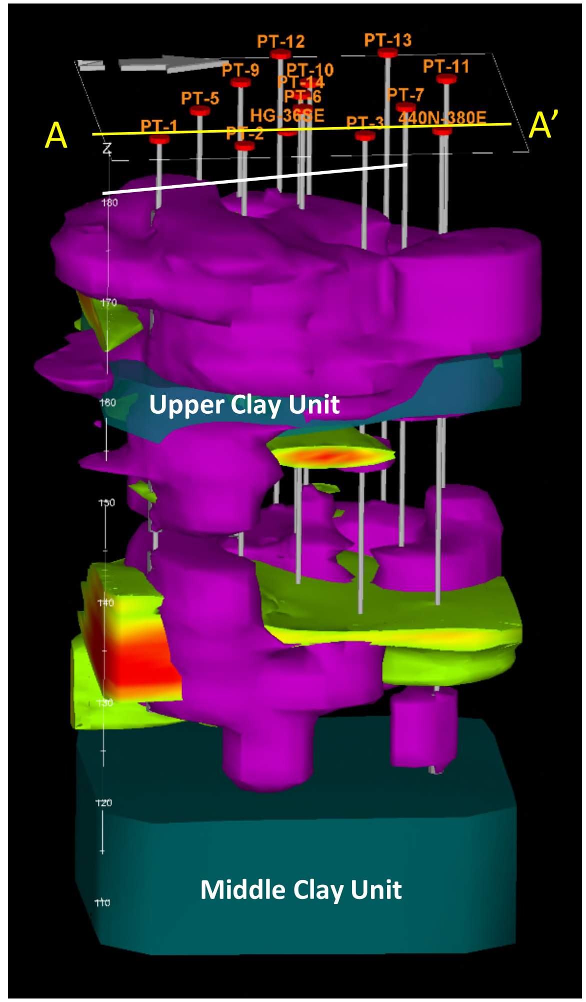
TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**2-8**
PROJECT #	117-2201329	
DATE	8-12-14	

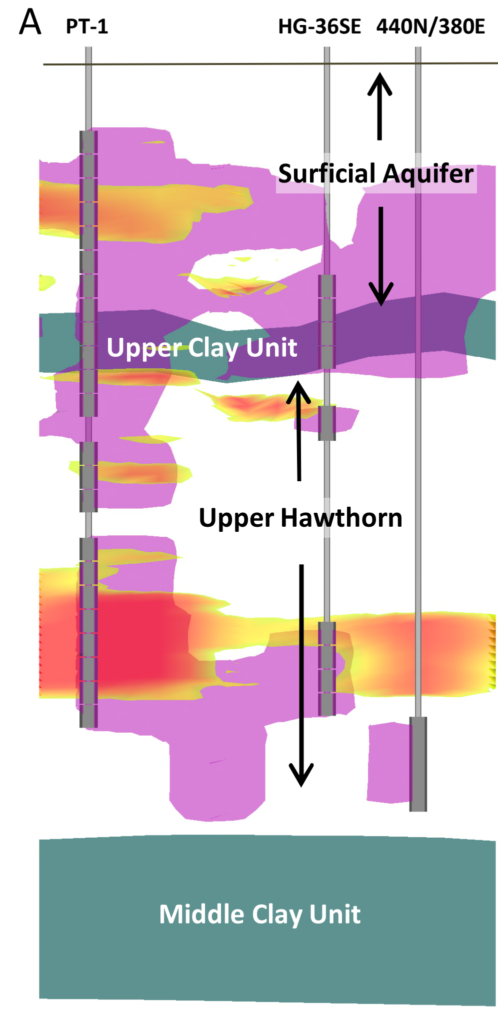
T:\Gainesville\ISGS_Process Area Remediation\Upper Hawthorn\Pilot Test\Report\Figures\Figure 2-8 Reagent in Core Photos.pptx



1) Projected DNAPL impacts.



2) DNAPL impacts and reagent distribution.



3) Cross Section.

Explanation:

- DNAPL Rating 1
- DNAPL Rating 2
- DNAPL Rating 3
- DNAPL Rating 4
- DNAPL Rating 5
- Reagent Distribution

Note: DNAPL represented for kriged DNAPL-rating
Values of greater than or equal to 3.6

TITLE:	RADIUS OF INFLUENCE OF INJECTED REAGENT FOR PILOT-TEST AREA, CROSS-SECTION A-A'
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	2-9a
PROJECT #	117-2201303	
DATE	3/31/15	

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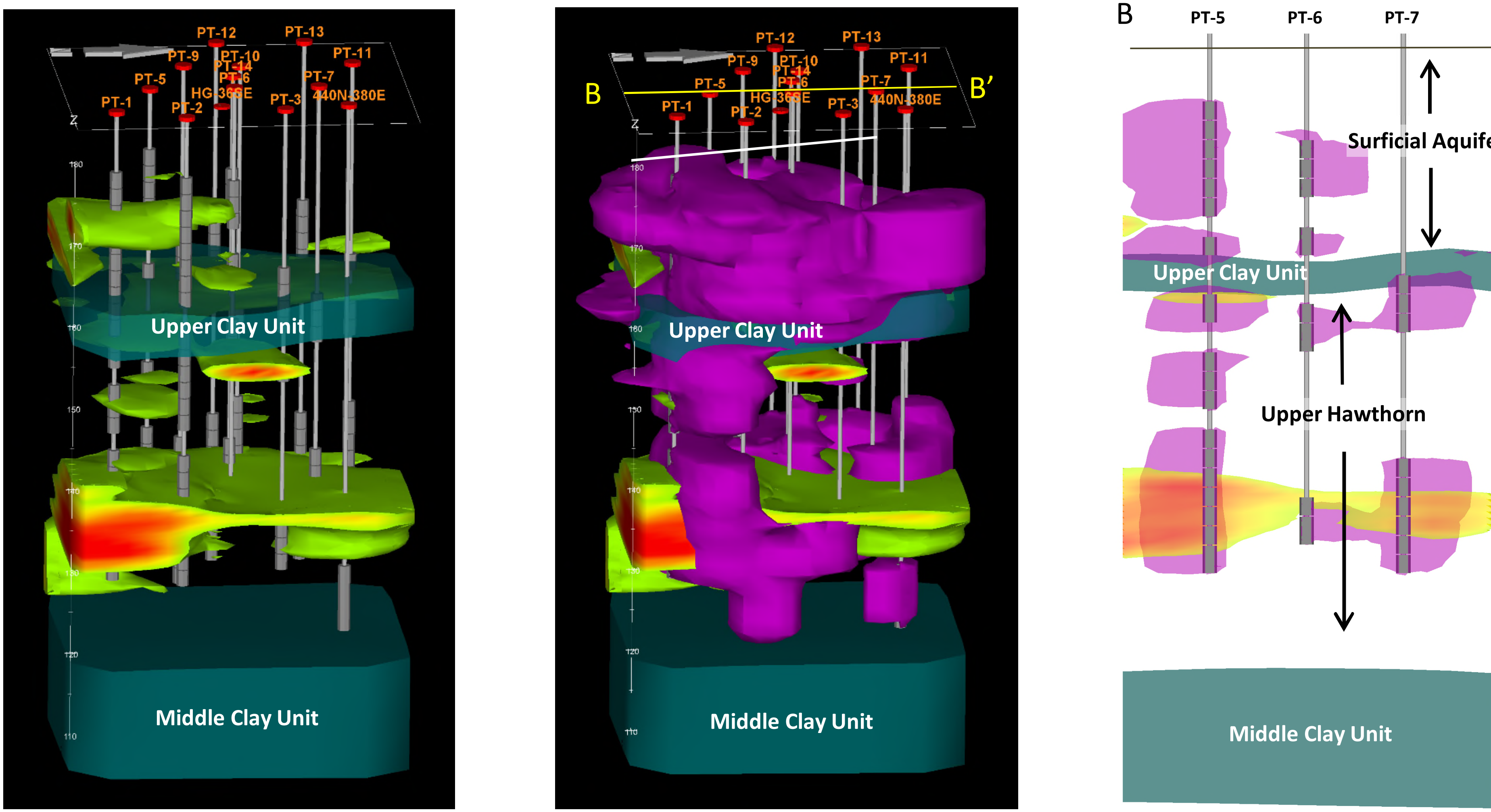


1) Projected DNAPL impacts.

2) DNAPL impacts and reagent distribution.

3) Cross Section.

Explanation:

- DNAPL Rating 1
- DNAPL Rating 2
- DNAPL Rating 3
- DNAPL Rating 4
- DNAPL Rating 5
- Reagent Distribution

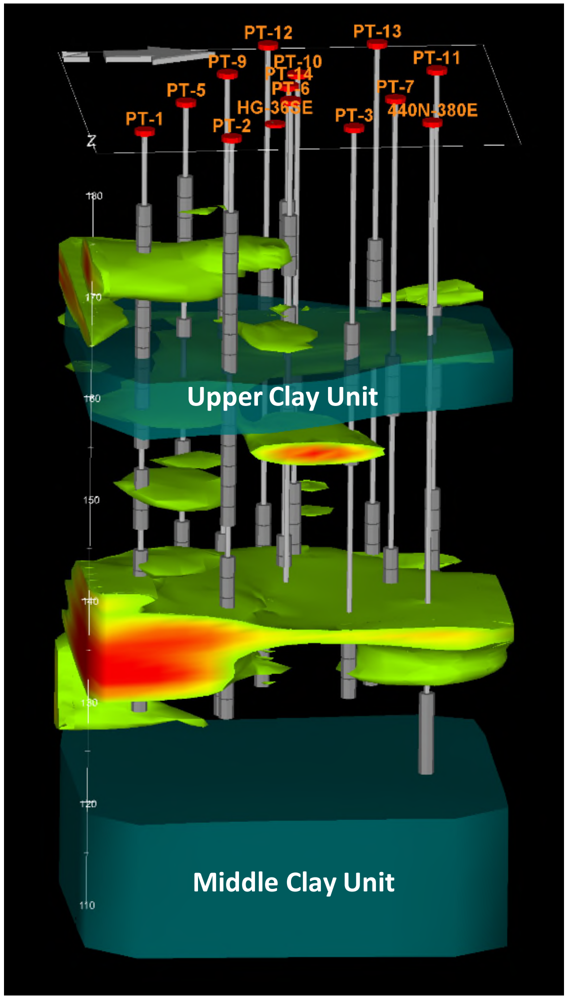
Note: DNAPL represented for kriged DNAPL-rating Values of greater than or equal to 3.6

TITLE:	RADIUS OF INFLUENCE OF INJECTED REAGENT FOR PILOT-TEST AREA, CROSS-SECTION B-B'
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

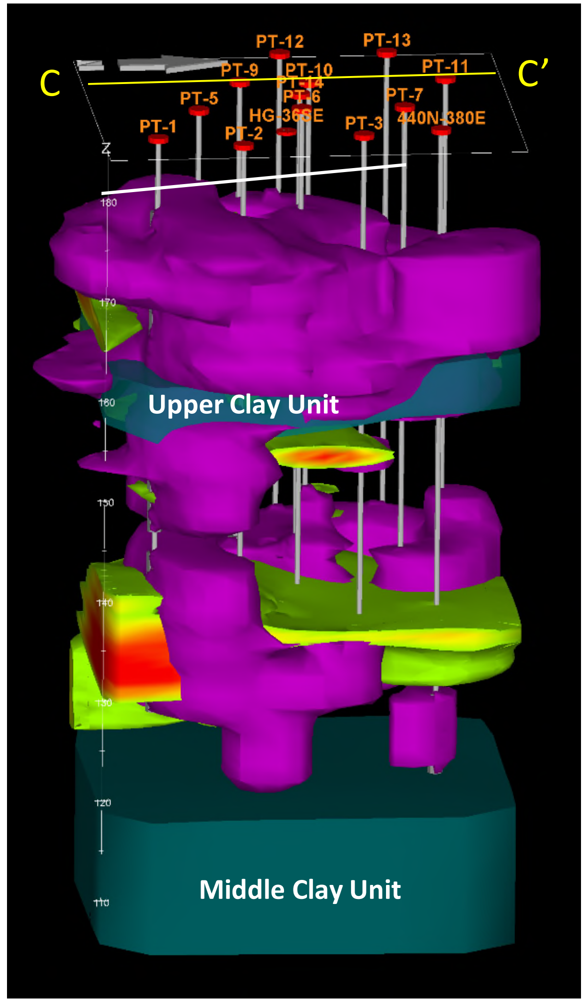
TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	2-9b
PROJECT #	117-2201303	
DATE	3/31/15	

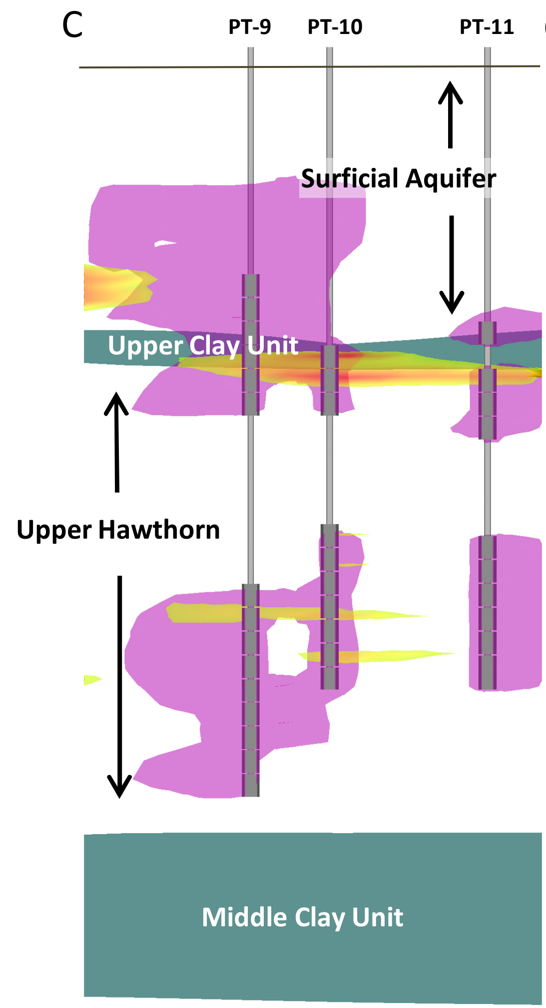
T:\Gainesville\SGS_Process_Area Remediation\Upper_Hawthorn\Pilot_Test\Report\Figures\Figure_2-9b NAPL_Reagent_rev_033115.pptx



1) Projected DNAPL impacts.



2) DNAPL impacts and reagent distribution.



3) Cross Section.

Explanation:

- DNAPL Rating 1
- DNAPL Rating 2
- DNAPL Rating 3
- DNAPL Rating 4
- DNAPL Rating 5
- Reagent Distribution

Note: DNAPL represented for kriged DNAPL-rating Values of greater than or equal to 3.6

TITLE:	RADIUS OF INFLUENCE OF INJECTED REAGENT FOR PILOT-TEST AREA, CROSS-SECTION C-C’		
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida		
TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	LD	2-9c
	PROJECT #	117-2201303	
	DATE	3/31/15	

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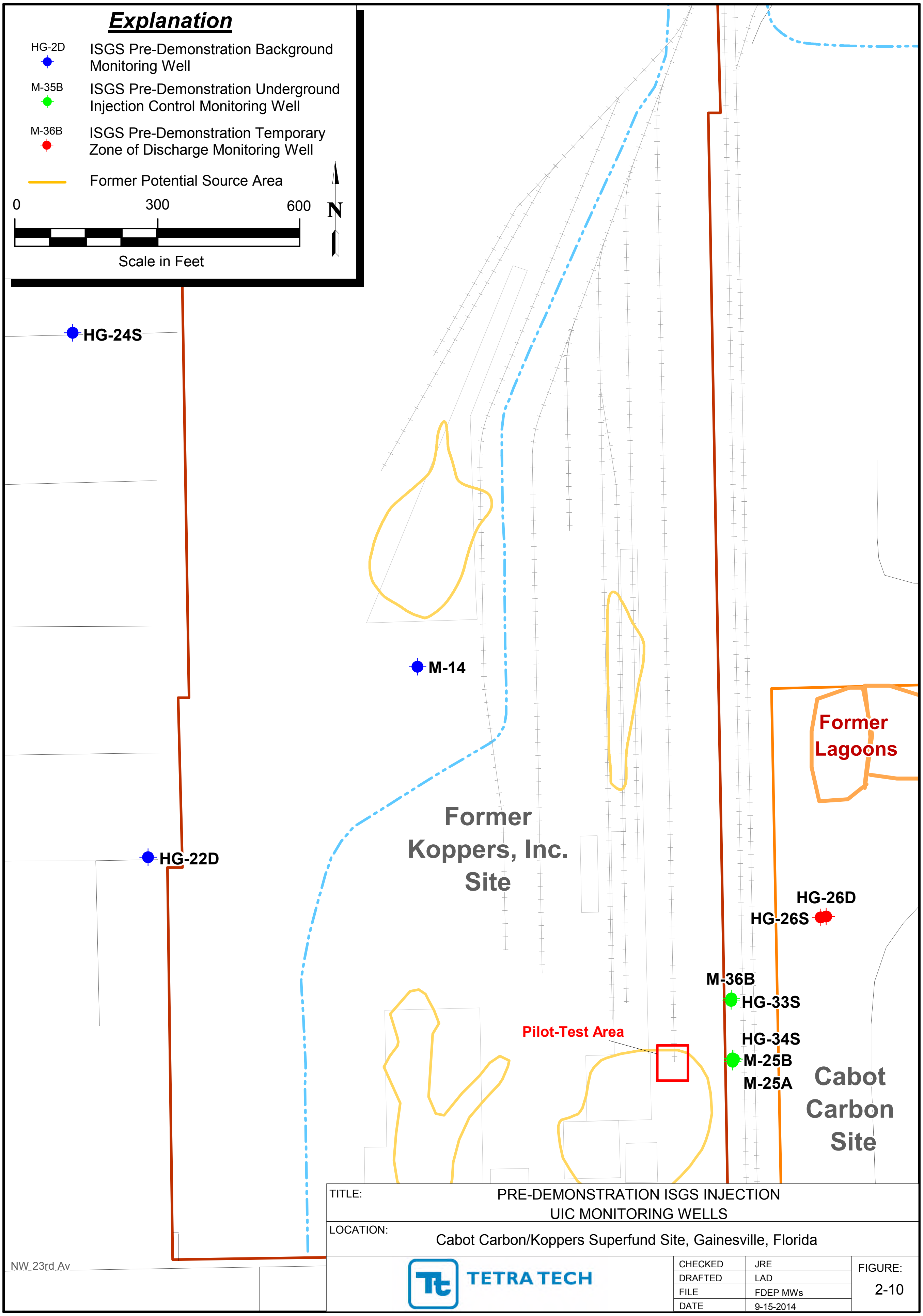

TITLE:	PRE-DEMONSTRATION ISGS INJECTION UIC MONITORING WELLS
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH

CHECKED	JRE	FIGURE:
DRAFTED	LAD	2-10
FILE	FDEP MWs	
DATE	9-15-2014	

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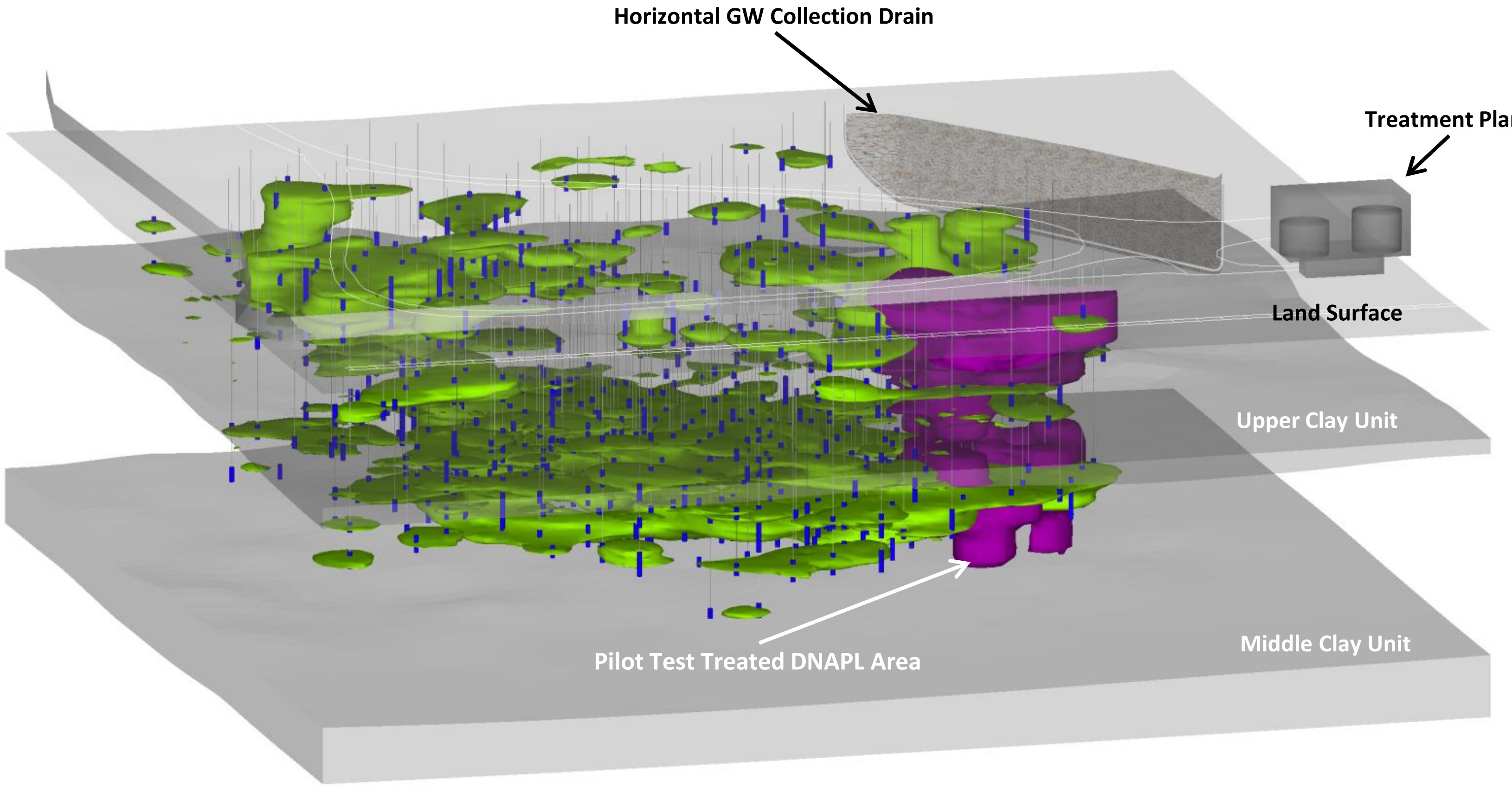
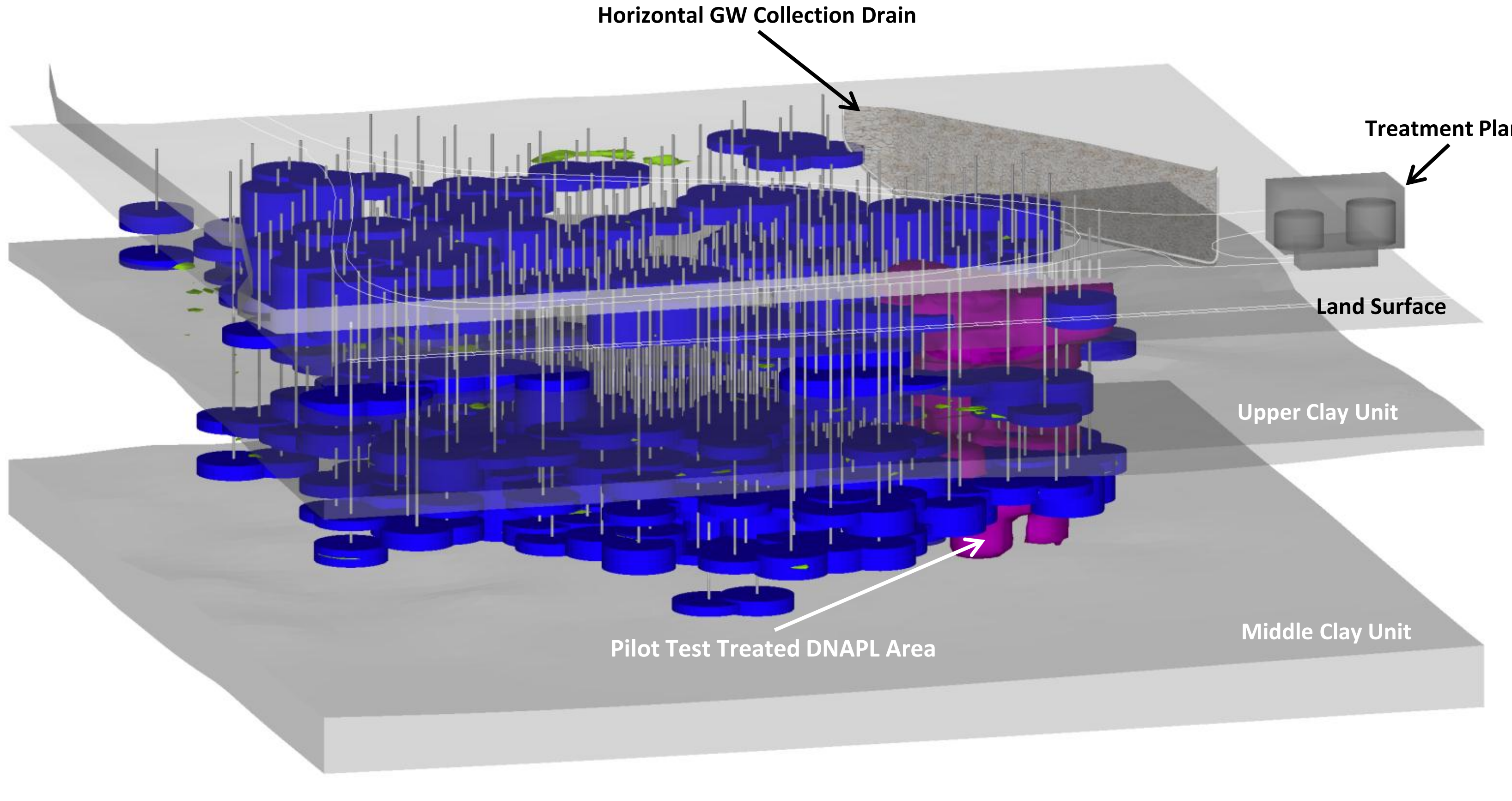
Former Process Area



DNAPL Impacts



Targeted ISGS Treatment

Explanation

Distance represents coordinate spacing in State Plane Florida 0903 Northern Zone (1983, US survey ft)

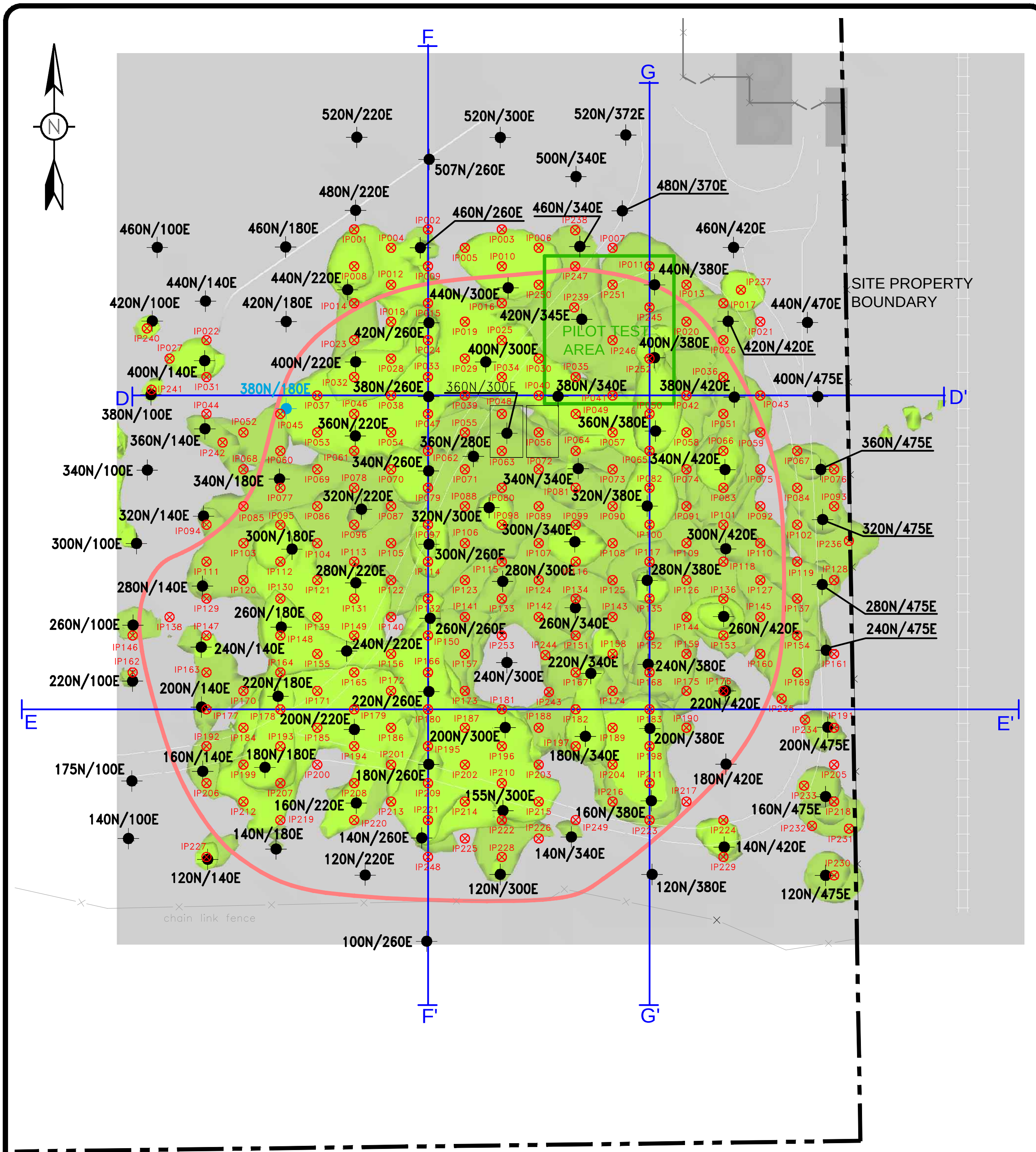
- ISGS injection intervals
- NAPL Impacts

TITLE:	THREE-DIMENSIONAL DISTRIBUTION OF DNAPL IMPACTS AND TARGETED INJECTION ZONES
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	AW	3-1
PROJECT #	117-2201329	
DATE	10/30/14	

T:\Gainesville\ISGS_Process Area Remediation\Upper Hawthorn\Pilot Test\Report\Figures\Figure 3-1 3D Block Diagrams.pptx



0 80 160

SCALE IN FEET

EXPLANATION

IP001 FULL-SCALE ISGS INJECTION-POINT

380N/180E TIP FOR FULL-SCALE ISGS INJECTION

100N/260E TEMPORARY INJECTION POINT (TIP)

PRE-2012 PROJECTED DNAPL SOURCE AREA

D D' CROSS-SECTION LOCATION

TITLE:
FULL-SCALE ISGS INJECTION-POINT LOCATIONS FOR FINAL REMEDIATION DESIGN

LOCATION: Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

CHECKED	JE	FIGURE
DRAFTED	CP/ld	3-2
PROJ. #	117-2201303	
DATE	4-2-15	

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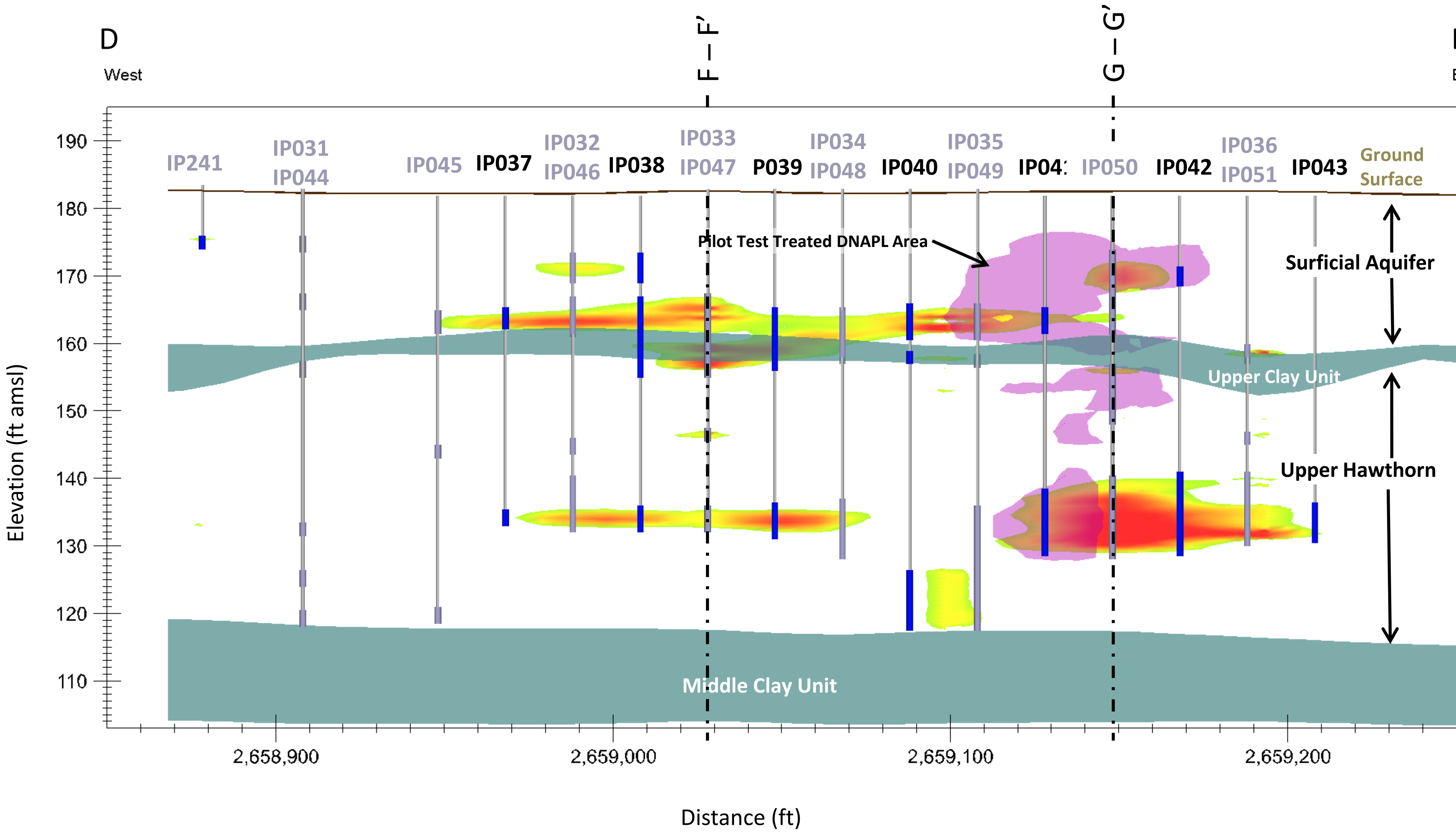
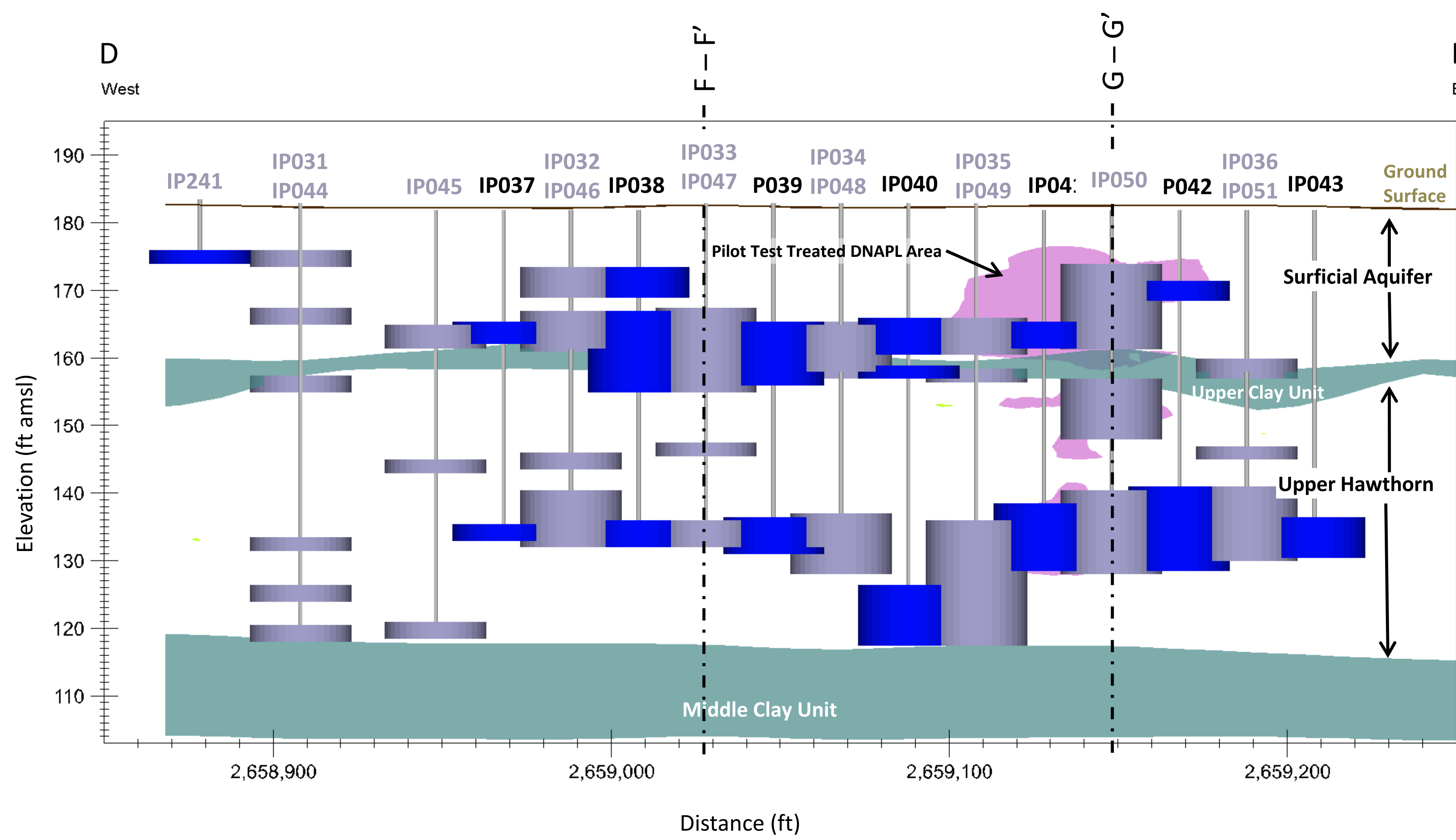




Explanation

Distance represents coordinate spacing in State Plane Florida 0903 Northern Zone (1983, US survey ft)

- ISGS injection intervals on section line.
- Offset injection intervals north and south of line.

Note: injection radius shown is 15 feet.

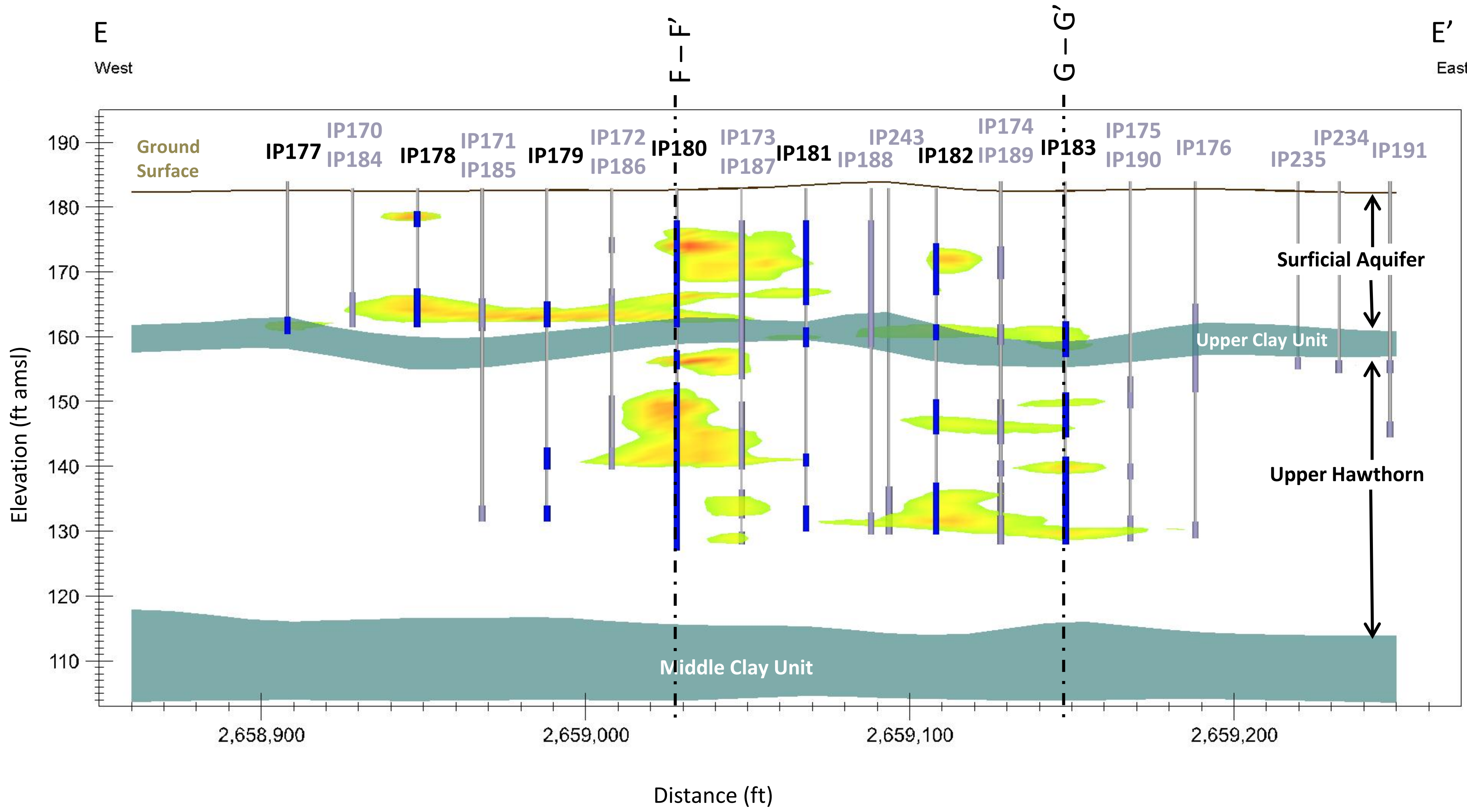
- NAPL Impacts

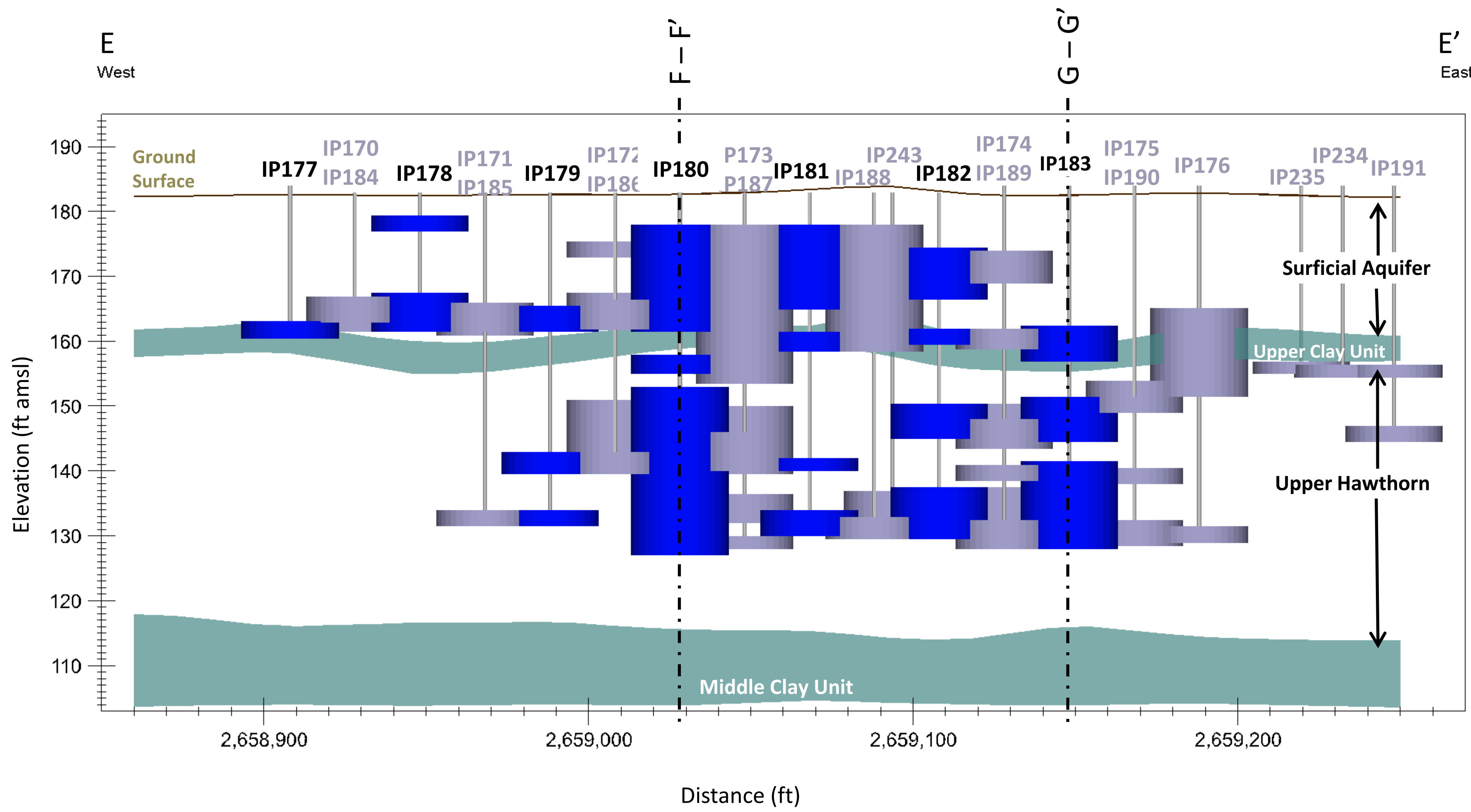
TITLE:	CROSS-SECTION D-D' WITH FULL-SCALE ISGS INJECTION INTERVALS
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	AW	3-3a
PROJECT #	117-2201329	
DATE	10/30/14	

I:\Gainesville\ISGS_Process Area Remediation\Upper Hawthorn\Pilot_Test\Report\Figures\Figure 3-3a_cross_sectionD.pptx





Explanation

Distance represents coordinate spacing in State Plane Florida 0903 Northern Zone (1983, US survey ft)

ISGS injection intervals on section line.

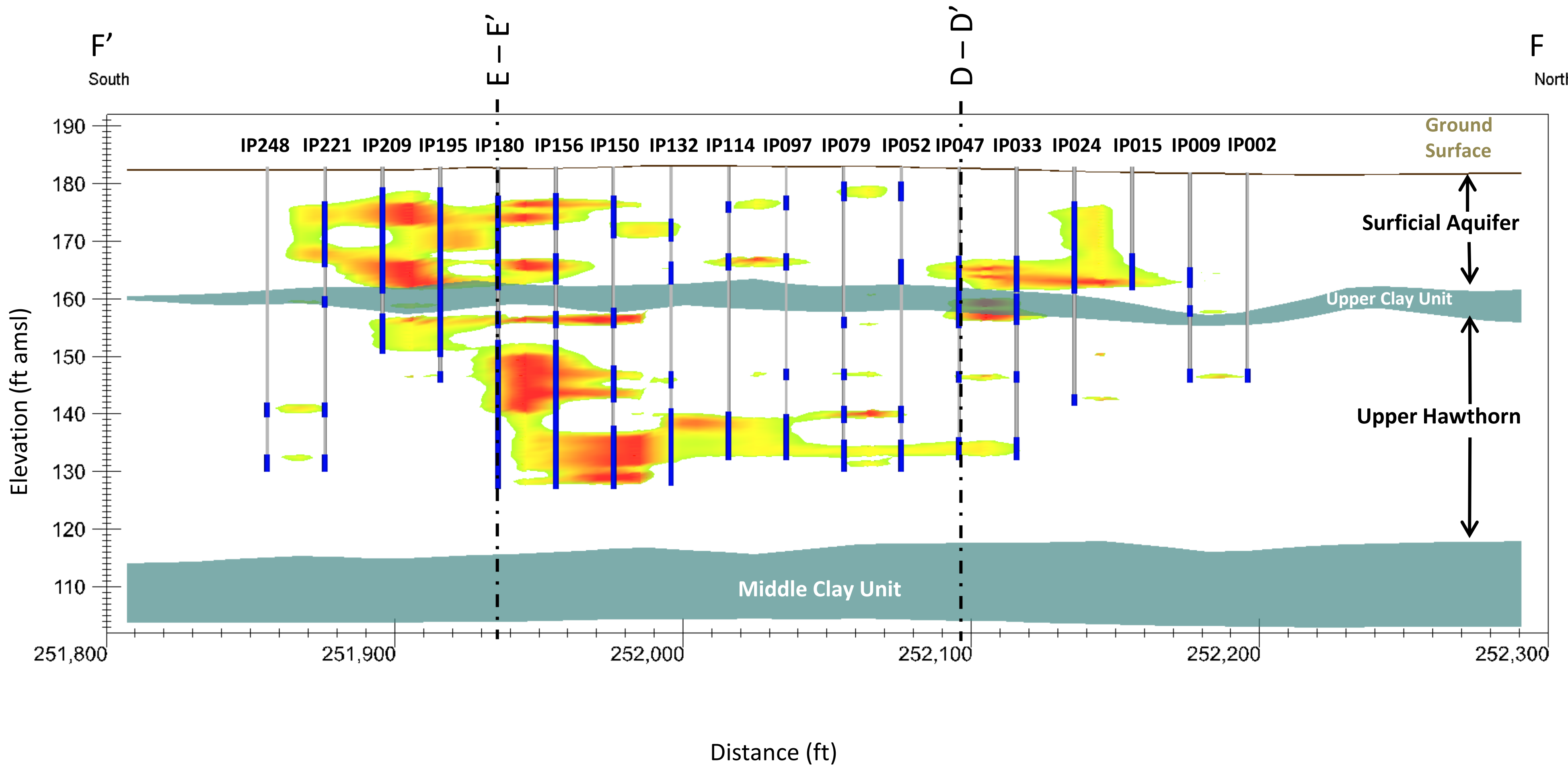
Offset injection intervals north and south of line.

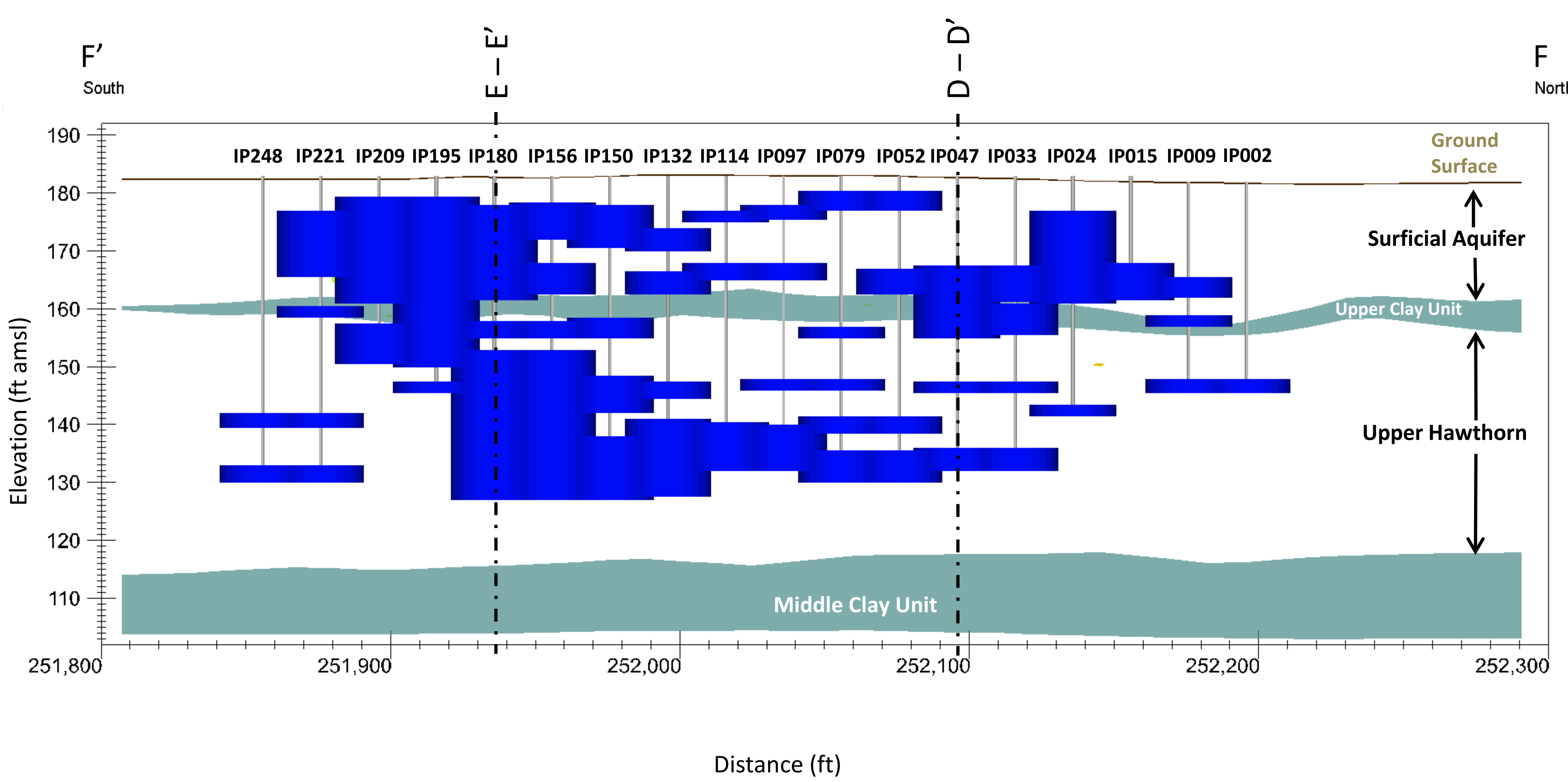
Note: injection radius shown is 15 feet.

NAPL Impacts

I:\Gainesville\ISGS_Process Area Remediation\Upper Hawthorn\Pilot Test\Report\Figures\Figure 3-2b_cross_sectionE.pptx

TITLE:	CROSS-SECTION E-E' WITH FULL-SCALE ISGS INJECTION INTERVALS		
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida		
TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	AW	3-3b
	PROJECT #	117-2201329	
	DATE	10/30/14	





Explanation

Distance represents coordinate spacing in State Plane Florida 0903 Northern Zone (1983, US survey ft)

ISGS injection intervals on section line.

NAPL Impacts

TITLE:	CROSS-SECTION F'-F WITH FULL SCALE ISGS INJECTION INTERVALS		
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida		
TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	AW	3-3c
	PROJECT #	117-2201329	
	DATE	10/30/14	

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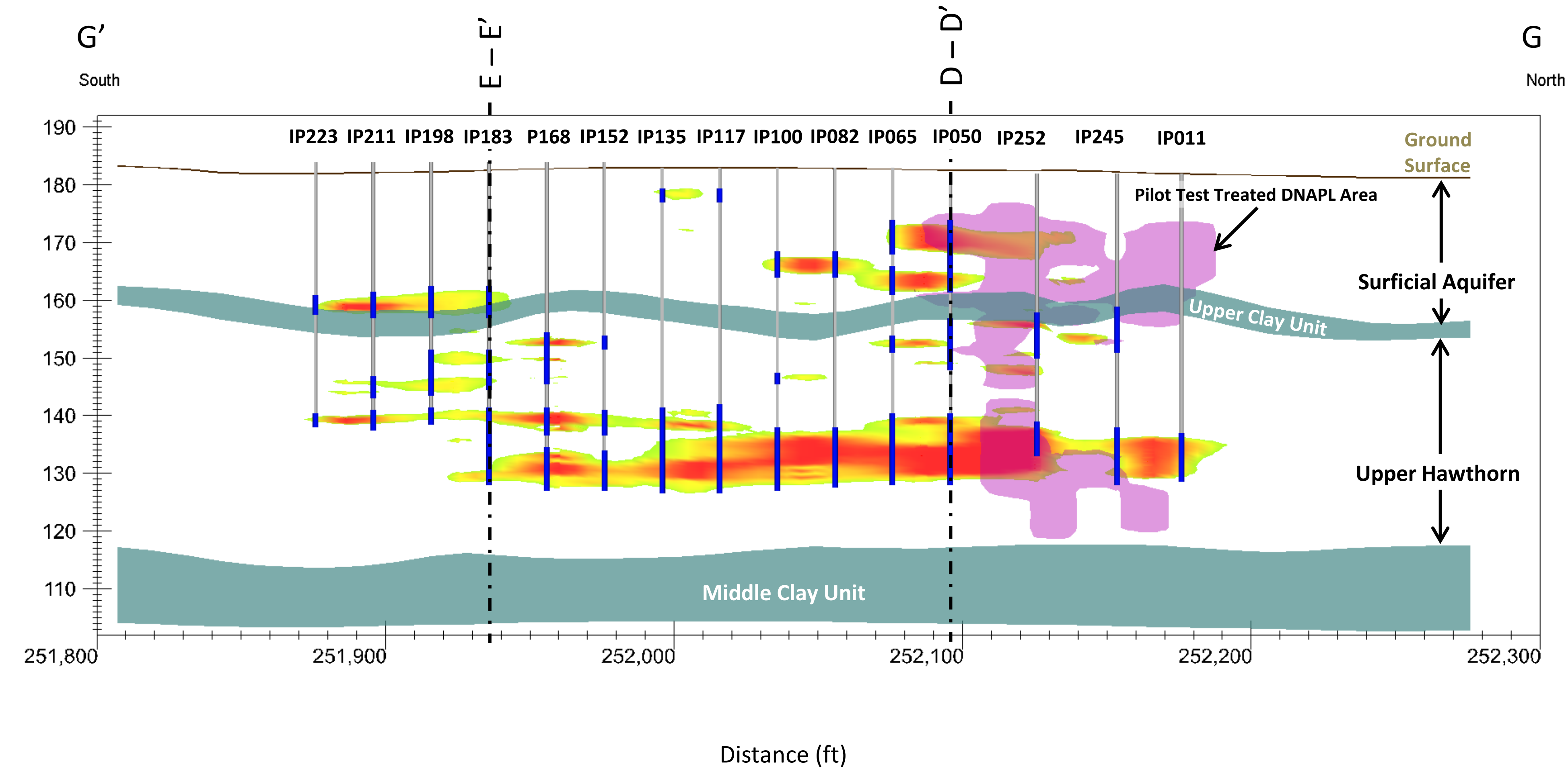

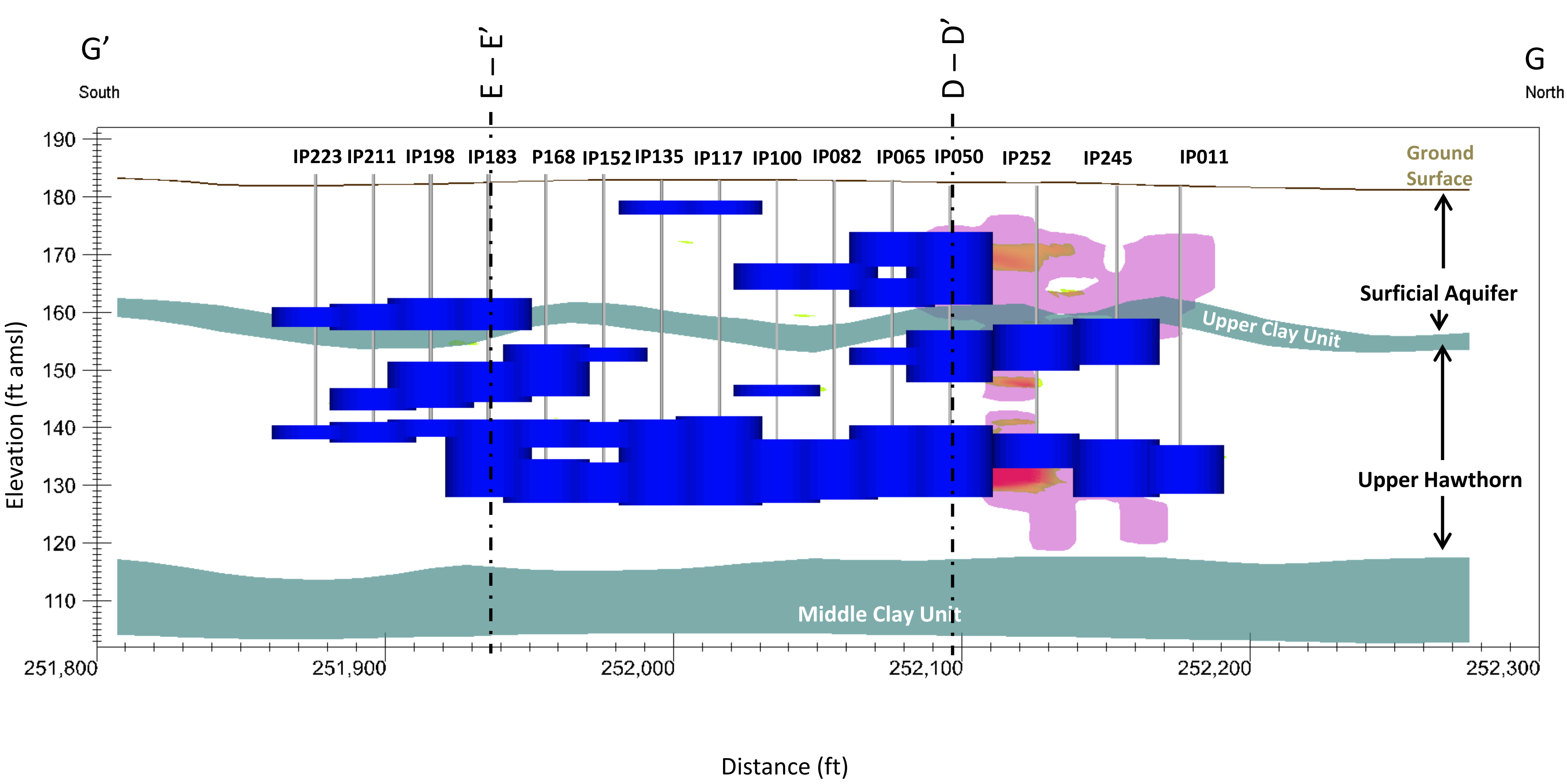

Explanation

Distance represents coordinate spacing in State Plane Florida 0903 Northern Zone (1983, US survey ft)

ISGS injection intervals on section line.

NAPL Impacts

TITLE:	CROSS-SECTION G'-G WITH FULL-SCALE ISGS INJECTION INTERVALS
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	AW	3-3d
PROJECT #	117-2201329	
DATE	10/30/14	

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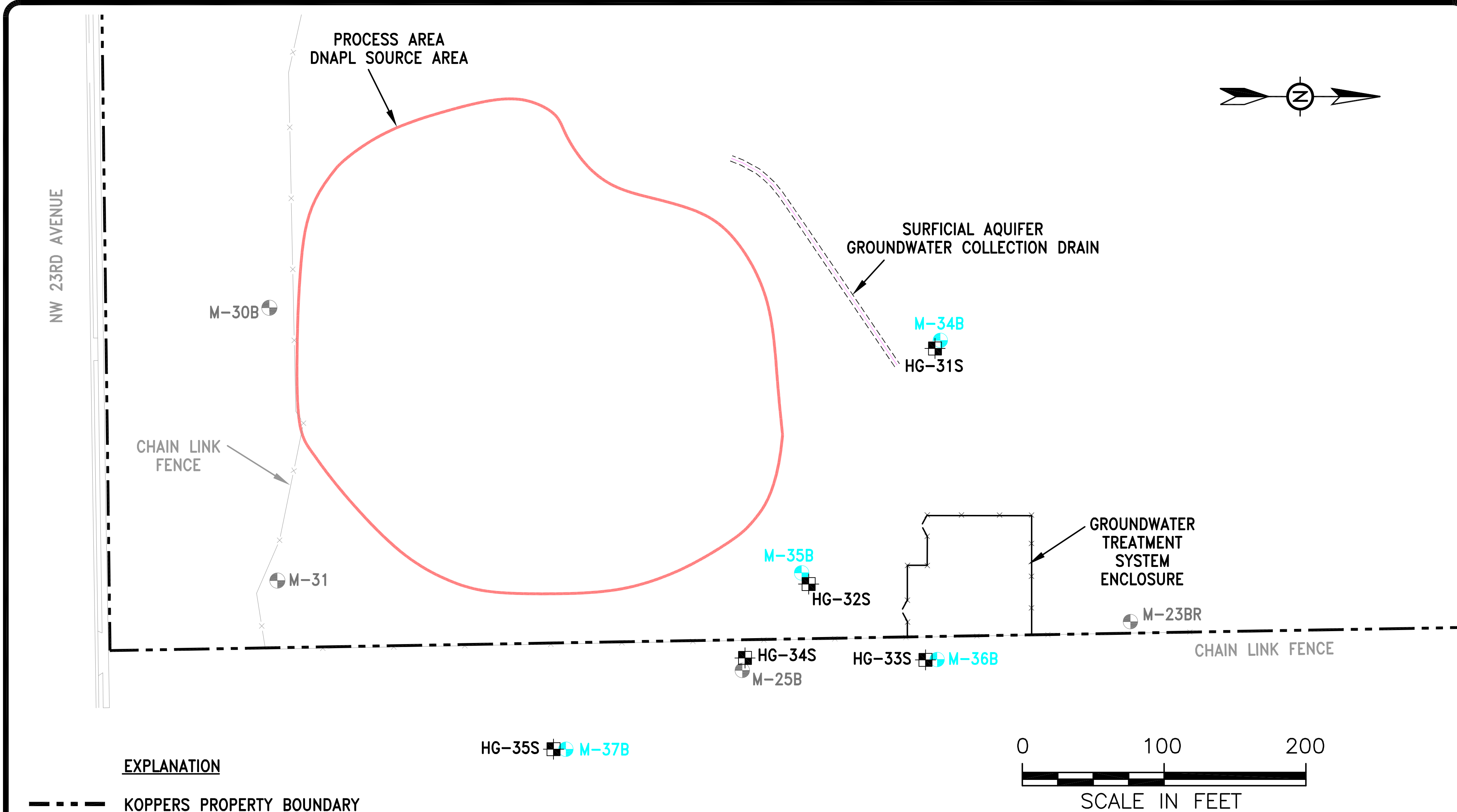


EXPLANATION

KOPPERS PROPERTY BOUNDARY

NEW ISGS SURFICIAL AQUIFER MONITORING WELL

EXISTING SURFICIAL AQUIFER MONITORING WELL

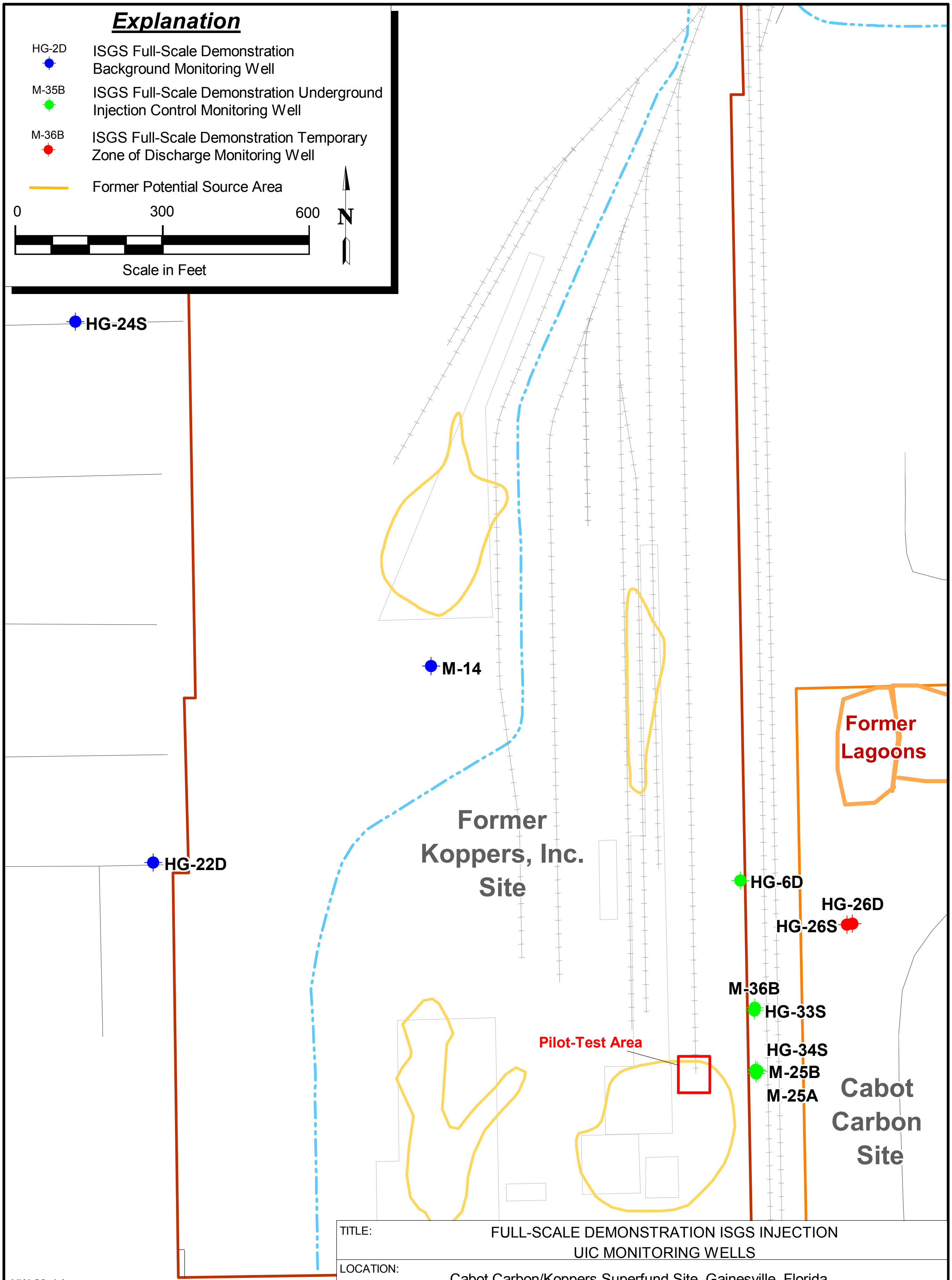
NEW ISGS UPPER HAWTHORN MONITORING WELL

TITLE: LOCATIONS OF FORMER PROCESS AREA GROUNDWATER MONITORING WELLS

LOCATION: Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH

CHECKED	JE	FIGURE:
DRAFTED	CP, DB, HF, ES	3-4
PROJ. #	117-2201303	
DATE	12/5/13	



TITLE: FULL-SCALE DEMONSTRATION ISGS INJECTION UIC MONITORING WELLS

LOCATION: Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH

CHECKED	JRE	FIGURE:
DRAFTED	LAD	3-5
FILE	FDEP MWs	
DATE	4-8-2015	

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TABLES

Table 1-1. Summary of the Former Process Area Pilot Test Dates

Task	Start Date	End Date
Initial Phase 1 Characterization	7/23/2012	8/29/2012
DNAPL Recovery	11/5/2012	ongoing
Additional Phase 1 Characterization and Well Installation	4/1/2013	4/16/2013
Aquifer Tests	3/17/2014	3/21/2014
Hydraulic Profile Tool Tests	3/24/2014	3/25/2014
ISGS Pilot Test Injections	3/25/2014	4/11/2014
Post-ISGS Radius of Influence Cores	6/23/2014	6/26/2014

Table 2-1. Summary of pSOD Results

Sample ID	Geologic Unit	Area/ Sample Description	Initial KMnO4 (g/L)	Final KMnO4 (g/L)	pSOD (g KMnO4/kg dry soil)	Average pSOD (g KMnO4/kg dry soil)
1	N/A	Blank	20	20.01	N/A	N/A
11	Surficial	Process Area/ Surficial Clean	20	18.55	2.9	2.90
12	Surficial		20	18.61	2.77	
13	Surficial		20	18.48	3.04	
14	Surficial	Process Area/ Surficial NAPL	20	8.09	23.79	24.24
15	Surficial		20	7.83	24.33	
16	Surficial		20	7.69	24.59	
17	Surficial	North Lagoon/ Surficial NAPL	20	5.91	28.2	26.68
18	Surficial		20	6.71	26.57	
19	Surficial		20	7.34	25.27	
2	Hawthorn	Process Area/ Hawthorn Clean	20	18.75	2.5	2.59
3	Hawthorn		20	18.68	2.64	
4	Hawthorn		20	18.68	2.64	
5	Hawthorn	Process Area/ Hawthorn NAPL	20	1.29	37.38	34.77
6	Hawthorn		20	3.32	33.35	
7	Hawthorn		20	3.23	33.57	
8	Hawthorn	North Lagoon & Drip Track/ Hawthorn NAPL	20	0	40.02	39.83
9	Hawthorn		20	0.13	39.76	
10	Hawthorn		20	0.17	39.7	

N/A = Not Applicable
pSOD = Permanganate Soil Oxidant Demand
Aqueous phase volume = 0.1 L
Mass dry soil weight = 0.05 kg

Table 2-2. Comparison of Targeted and Actual Injection Volumes For Pilot Test

		Zone Volume Injected (gal)			Total Volume Injected (gal)		
Injection Point	**Hydrogeologic Unit**	**Target**	**Actual**	**Difference**	**Target**	**Actual**	**Difference**
PT1	Surficial	944	787	-157	2,554	2,553	-1
	Upper Hawthorn	1,610	1,766	156			
PT2	Surficial	888	766	-122	2,443	2,443	0
	Upper Hawthorn	1,555	1,677	122			
PT3	Surficial	222	222	0	1,055	1,054	-1
	Upper Hawthorn	833	832	-1			
PT4[1]	Surficial	0	0	0	944	0	-944
	Upper Hawthorn	944	0	-944			
PT5	Surficial	944	328	-616	2,332	2,332	0
	Upper Hawthorn	1,388	2,004	616			
PT6	Surficial	500	347	-153	1,055	839	-216
	Upper Hawthorn	555	492	-63			
PT7	Surficial	0	0	0	999	1,215	216
	Upper Hawthorn	999	1,215	216			
PT8[1]	Surficial	333	0	-333	1,832	0	-1,832
	Upper Hawthorn	1,499	0	-1,499			
PT9	Surficial	333	256	-77	1,888	1,888	0
	Upper Hawthorn	1,555	1,632	77			
PT10	Surficial	56	0	-56	1,110	1,110	0
	Upper Hawthorn	1,055	1,110	55			
PT11	Surficial	111	0	-111	1,277	1,276	-1
	Upper Hawthorn	1,166	1,276	110			
PT12[2]	Surficial	0	610	610	0	1,832	1,832
	Upper Hawthorn	0	1,222	1,222			
PT13[2]	Surficial	0	504	504	0	1,831	1,831
	Upper Hawthorn	0	1,327	1,327			
PT14[2]	Surficial	0	262	262	0	595	595
	Upper Hawthorn	0	333	333			
440N/380E - first	Surficial	0	0	0	444	444	0
	Upper Hawthorn	444	444	0			
440N/380E - second[3]	Surficial	0	0	0	444	100	-344
	Upper Hawthorn	444	100	-344			
420N/345E[1]	Surficial	0	0	0	444	0	-444
	Upper Hawthorn	444	0	-444			
Totals					**18,821**	**19,512**	**691**

[1] Injection Point not used
[2] New Injection Points added in field
[3] Test stopped in field at 100 gallons; injection rate unchanged from 3/28/2014

Table 2-3. Pumping Test Analysis Results.

Pumping Well	Observation Well	Distance from Pumping Well (ft)	Analysis Method	Transmissivity (ft^2/day)	Hydraulic Conductivity[1] (ft/day)	
				Well Result	Well Result	Average
M-40BE	M-40BE	0	Theis	16.2	0.9	N/A
	PW-1	17.3	Theis	183.3	10.5	11.97
	OW-1	22.5	Theis	235.5	13.5	
	OW-2 [2]	41.1	N/A	N/A	N/A	N/A
	M-41BE [2]	53.6	N/A	N/A	N/A	N/A
	M-42BE [2]	60.7	N/A	N/A	N/A	N/A

[1] Average Surficial Aquifer Saturated Thickness = 17.5 feet

[2] No hydraulic response observed

Table 2-4. Slug-Test Analysis Results

Geologic Unit	Well Name	Date	Test Type	Analysis Method	Hydraulic Conductivity (feet/day)	
					Test	Average
Surficial	M-38BE	3/18/2014	Falling Head	Bouwer-Rice	45.95	44.69
			Rising Head	Bouwer-Rice	43.42	
	M-39BE	3/18/2014	Falling Head	Bouwer-Rice	1.52	1.51
			Rising Head	Bouwer-Rice	1.51	
	M-40BE	3/18/2014	Falling Head	Bouwer-Rice	4.39	5.13
			Rising Head	Bouwer-Rice	5.88	
	M-41BE	3/18/2014	Falling Head	Bouwer-Rice	19.30	18.44
			Rising Head	Bouwer-Rice	17.58	
	M-42BE	3/18/2014	Falling Head	Bouwer-Rice	3.41	3.94
			Rising Head	Bouwer-Rice	4.48	
UH	HG-32S	3/20/2014-3/21/2014	Falling Head	Bouwer-Rice	1.26	1.19
			Rising Head	Bouwer-Rice	1.13	
	HG-37SE	3/19/2014	Falling Head	Bouwer-Rice	1.16	1.24
			Rising Head	Bouwer-Rice	1.33	
	HG-38SE	3/19/2014	Falling Head	Bouwer-Rice	0.65	0.62
			Rising Head	Bouwer-Rice	0.58	
	HG-39SE	3/20/2014-3/21/2014	Falling Head	Bouwer-Rice	0.43	0.48
			Rising Head	Bouwer-Rice	0.52	
	HG-40SE	3/19/2014	Falling Head	Bouwer-Rice	0.29	0.29
			Rising Head	N/A	N/A	

N/A = Not Applicable

Table 2-5a. Pre- and Post-ISGS pilot-test water-quality results for Surficial Aquifer UIC monitoring wells.

Analyte	Federal MCL	Florida GCTL[2]	M-14[5]	M-25A	M-25A	M-25A	M-25B	M-25B	M-25B	M-36B	M-36B	M-36B
		UIC Well Type	Background	Compliance	Compliance	Compliance	Compliance	Compliance	Compliance	Compliance	Compliance	Compliance
		Sample Date	1/16/2008	3/18/2014	6/4/2014	8/17/2014	3/18/2014	6/4/2014	8/17/2014	3/18/2014	6/4/2014	8/19/2014
		Sample Type	SMP	SMP	SMP	SMP	SMP	SMP	SMP	SMP	SMP	SMP
Total Metals (µg/L)												
ALUMINUM	50[1]	200[4]	222	192	153	30 I	39	97 I	122	96	812	324
ANTIMONY	6	6[3]	< 10	1.2	0.450 J	0.440 I	< 0.160	< 0.160	< 0.160	< 0.160	0.810 J	0.450 I
ARSENIC	10	10[3]	6	1.2	4.1	6.3	4.0	3.6	2.4	0.78	1,570	663
BERYLLIUM	4	4[3]	< 4	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
CADMIUM	5	5[3]	< 5	<0.090	< 0.090	< 0.09	< 0.090	0.150 J	< 0.09	< 0.090	0.280 J	< 0.09
CHLORIDE	250,000[1]	250,000[4]	6,100	1,300	6,000	3,500	26,700	20,300	11,900	7,800	17,800	17,100
CHROMIUM	100	100[3]	< 5	< 0.18	< 0.18	< 0.18	0.30	0.36 J	0.39 I	< 0.18	0.52 J	0.43 I
IRON	300[1]	300[4]	428	265	3,900	3,520	286	247	266	909	1,660	1,560
LEAD	15	15[3]	< 3	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	0.56	0.16 I
LITHIUM	-	140[2]	NA	< 10.0	< 10	< 10	< 10.0	< 10	< 10	< 10.0	< 10	< 10
MANGANESE	50[1]	50[4]	2.1	0.5	12	7.6	63	51	58	27	19	20
MERCURY	2	2[3]	< 0.2	< 0.012	0.013 I	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012
MOLYBDENUM	-	35[2]	NA	2.80	1.6 J	1.70 I	< 0.28	< 0.28	< 0.28	2.30	6.30	5.80
SELENIUM	50	50[3]	< 5	< 1.1	< 1.1	1.2 I	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
SODIUM	-	160,000[3]	3,350	1,610	4,510	3,340	17,100	16,200	13,600	6,740	33,000	30,500
THALLIUM	2	2[3]	< 10	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dissolved Metals (µg/L)												
ALUMINUM	50[1]	200[4]	NA	112	112	68 I	95	98 I	81 I	110	74 I	65 I
ANTIMONY	6	6[3]	NA	1.6	0.370 I	0.620 I	< 0.160	< 0.160	< 0.160	< 0.160	0.750 J	0.470 I
ARSENIC	10	10[3]	NA	0.51	4.6	5.5	3.2	3.9	2.1	< 0.42	1,600	663
BERYLLIUM	4	4[3]	NA	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
CADMIUM	5	5[3]	NA	< 0.090	< 0.090	< 0.09	< 0.090	< 0.090	< 0.09	< 0.090	< 0.090	< 0.09
CHROMIUM	100	100[3]	NA	< 0.18	< 0.18	< 0.18	0.45	0.35 I	0.36 I	< 0.18	0.37 I	0.29 I
IRON	300[1]	300[4]	NA	< 2.5	4,510	3,250	245	248	281	753	1,560	1,500
LEAD	15	15[3]	NA	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
LITHIUM	-	140[2]	NA	NA	< 10	< 10	NA	< 10	< 10	NA	< 10	< 10
MANGANESE	50[1]	50[4]	NA	0.4	13	7.9	63	50	59	27	18	20
MERCURY	2	2[3]	NA	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	0.019 I	< 0.012	< 0.012	< 0.012
MOLYBDENUM	-	35[2]	NA	2.70	1.4 I	1.80 I	< 0.28	< 0.28	0.41 I	2.20	5.90	5.20
SELENIUM	50	50[3]	NA	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
SODIUM	-	160,000[3]	NA	1,590	4,460	3,280	17,500	16,400	14,000	6,770	30,400	30,900
THALLIUM	2	2[3]	NA	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Other Parameters												
TOTAL DISSOLVED SOLIDS (µg/L)	500,000[1]	500,000[4]	60,200	163,000	231,000	194,000	196,000	177,000	180,000	163,000	197,000	188,000
pH (S.U.)	6.5 - 8.5[1]	6.5 - 8.5[4]	4.7	7.45	6.97	7.43	7.00	6.88	7.24	7.83	6.63	6.61
COLOR (color units)	15[1]	15[4]	NA	< 5.0	10	< 5.0	10.0	15.0	15.0	10.0	10.0	15.0

Notes:

I = The reported value is between the laboratory method and practical quantitation limit.

J = Estimated value.

NA = Not analyzed.

Concentration exceeds Florida GCTL (yellow)

Concentration exceeds Federal MCL (blue)

(1) Federal MCL is the Secondary Drinking Water Standard

(2) Florida Groundwater Cleanup Target Levels (GCTLs) are guidelines as set forth in 62-777 Florida Administrative Code (F.A.C.)

(3) Florida GCTL is the Primary Drinking Water Standard as set forth in 62-550 F.A.C.

(4) Florida GCTL is the Secondary Drinking Water Standard as set forth in 62-550 F.A.C.

(5) As reported in ISBS Pilot Study Report, January 30, 2009, Adventus

Table 2-5b. Pre- and Post-ISGS pilot-test injections water-quality results for Upper Hawthorn UIC monitoring wells.

Analyte	Federal MCL	Florida GCTL[2]	HG-22D Background 3/19/2014 SMP	HG-22D Background 6/5/2014 SMP	HG-22D Background 8/17/2014 SMP	HG-24S Background 3/18/2014 SMP	HG-24S Background 6/4/2014 SMP	HG-24S Background 8/17/2014 SMP	HG-33S Compliance 3/19/2014 SMP	HG-33S Compliance 6/5/2014 SMP	HG-33S Compliance 8/20/2014 SMP	HG-34S Compliance 3/19/2014 SMP	HG-34S Compliance 6/5/2014 SMP	HG-34S Compliance 8/21/2014 SMP
		Well ID / UIC Well Type / Sample Date / Sample Type												
Total Metals (µg/L)														
ALUMINUM	50[1]	200[4]	165	215	40 I	68	201	240	304	156	72 I	478	611	673
ANTIMONY	6	6[3]	0.470	0.920 I	0.290 I	< 0.160	< 0.160	< 0.160	< 0.160	< 0.160	< 0.160	< 0.160	0.180 I	< 0.160
ARSENIC	10	10[3]	0.88	< 0.42	0.84 I	2.7	2.5	2.7	0.78	< 0.42	< 0.42	0.69	< 0.42	0.44 I
BERYLLIUM	4	4[3]	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
CADMIUM	5	5[3]	15	28	2.0	0.090	0.280 J	0.18 I	< 0.090	< 0.090	< 0.09	< 0.090	< 0.090	< 0.09
CHLORIDE	250,000[1]	250,000[4]	3,100	2,200	5,700	9,100	9,100	9,200	7,800	7,900	8,000	28,500	24,500	35,400
CHROMIUM	100	100[3]	11	1.2	5.2	< 0.18	0.38 J	0.48 I	0.32	< 0.18	< 0.18	< 0.18	0.2	< 0.18
IRON	300[1]	300[4]	927	450	796	830	1,120	961	999	892	1,010	18	282	317
LEAD	15	15[3]	< 0.12	0.32 I	0.16 I	< 0.12	0.6	0.56	< 0.12	0.12 I	< 0.12	< 0.12	< 0.12	< 0.12
LITHIUM	-	140[2]	< 10.0	< 10	< 10	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10	< 10
MANGANESE	50[1]	50[4]	16	6.6	28	26	34	33	28	28	27	0.6	11	12
MERCURY	2	2[3]	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012
MOLYBDENUM	-	35[2]	2.10	2.40	5.60	5.70	5.80	5.20	1.80	2.70	1.60 I	7.50	6.00	3.70
SELENIUM	50	50[3]	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
SODIUM	-	160,000[3]	2,810	1,680	7,760	5,420	5,420	5,180	6,640	6,530	6,790	11,000	8,740	13,700
THALLIUM	2	2[3]	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dissolved Metals (µg/L)														
ALUMINUM	50[1]	200[4]	120	61 I	73 I	96	76 I	51 I	99	32 I	69 I	470	304	633
ANTIMONY	6	6[3]	0.380	0.820 I	0.280 I	< 0.160	< 0.160	< 0.160	< 0.160	< 0.160	< 0.160	0.250	0.340 I	< 0.160
ARSENIC	10	10[3]	0.62	0.42	0.50 I	2.4	2.5	2.6	< 0.42	< 0.42	0.48 I	0.53	0.52 I	0.70 I
BERYLLIUM	4	4[3]	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
CADMIUM	5	5[3]	0.570	3.900	< 0.09	< 0.090	< 0.090	< 0.09	< 0.090	< 0.090	< 0.09	< 0.090	< 0.090	< 0.09
CHROMIUM	100	100[3]	0.55	< 0.18	1.3	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
IRON	300[1]	300[4]	340	160	192	744	952	690	887	772	799	5.4	52 I	84 I
LEAD	15	15[3]	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	0.17 I	< 0.12	< 0.12	0.12	< 0.12
LITHIUM	-	140[2]	NA	< 10	< 10	NA	< 10	< 10	NA	< 10	< 10	NA	< 10	< 10
MANGANESE	50[1]	50[4]	11	4.6	27	27	32	31	27	26	27	0.3	11	8.6
MERCURY	2	2[3]	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012
MOLYBDENUM	-	35[2]	1.80	2.0 I	5.50	5.80	6.10	5.00	1.90	2.80	1.60 I	8.00	5.80	3.40
SELENIUM	50	50[3]	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
SODIUM	-	160,000[3]	2,740	1,780	7,410	5,490	5,120	4,950	6,720	6,760	6,370	11,000	8,910	14,300
THALLIUM	2	2[3]	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Other Parameters														
TOTAL DISSOLVED SOLIDS (µg/L)	500,000[1]	500,000[4]	154,000	133,000	177,000	132,000	121,000	107,000	162,000	162,000	169,000	119,000	153,000	131,000
pH (S.U.)	6.5 - 8.5[1]	6.5 - 8.5[4]	7.62	7.43	8.18	7.68	7.71	7.99	7.86	7.77	7.73	8.92	9.27	9.24
COLOR (color units)	15[1]	15[4]	30.0	25.0	5.0	< 5.0	< 5.0	< 5.0	5.0	10.0	10.0	5.0	15.0	10.0

Notes:

I = The reported value is between the laboratory method and practical quantitation limit.

J = Estimated value.

NA = Not analyzed.

Concentration exceeds Florida GCTL

Concentration exceeds Federal MCL

(1) Federal MCL is the Secondary Drinking Water Standard

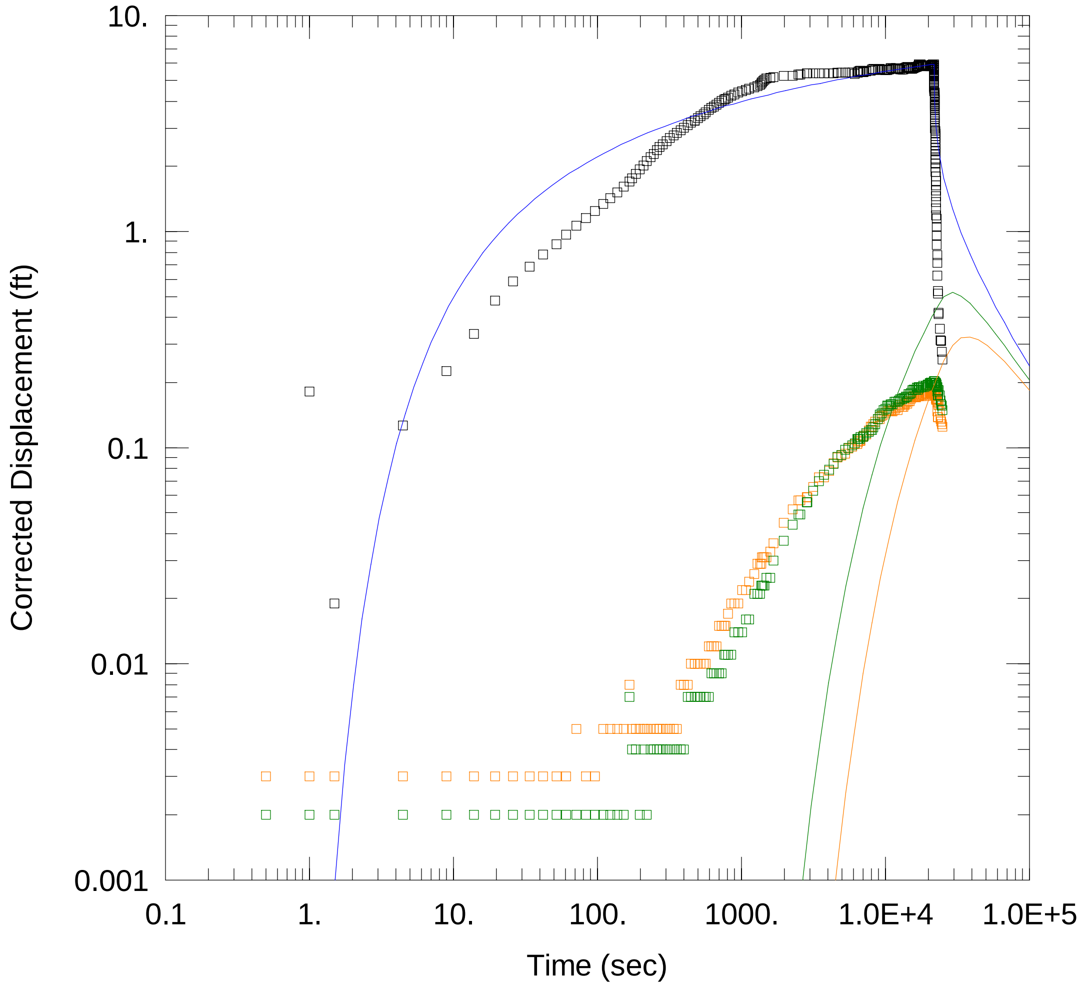
(2) Florida Groundwater Cleanup Target Levels (GCTLs) are guidelines as set forth in 62-777 Florida Administrative Code (F.A.C.)

(3) Florida GCTL is the Primary Drinking Water Standard as set forth in 62-550 F.A.C.

(4) Florida GCTL is the Secondary Drinking Water Standard as set forth in 62-550 F.A.C.

APPENDIX A

AQUIFER TESTING RESULTS



WELL TEST ANALYSIS

Data Set: T:\...\M-40BE Pump with MW-40BE and OW-1 Obs.aqt
Date: 07/22/14 Time: 08:52:12

PROJECT INFORMATION

Company: Tetra Tech
Client: Beazer East
Location: AZ
Test Well: M-40BE
Test Date: 3/21/14

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
M-40BE	2659033.238	251925.758

Observation Wells

Well Name	X (ft)	Y (ft)
□ M-40BE	2659033.238	251925.758
□ OW-1	2659053	251936
□ PW-1	2659041	251941

SOLUTION

Aquifer Model: Unconfined

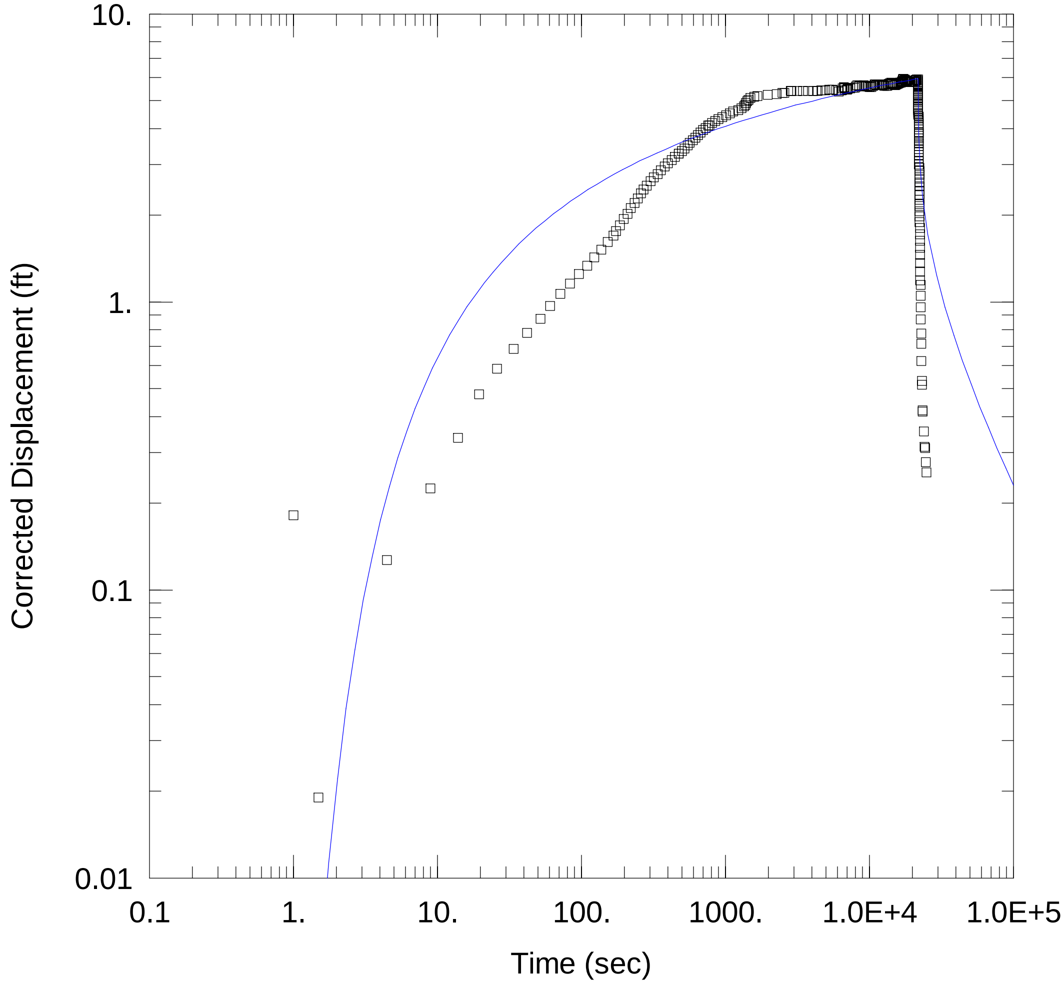
Solution Method: Theis

T = 0.1686 cm^2/sec

Kz/Kr = 0.1

S = 0.03381

b = 17.5 ft



WELL TEST ANALYSIS

Data Set: T:\...\M-40BE Pump with MW-40BE Obs.aqt
Date: 07/22/14 Time: 08:52:53

PROJECT INFORMATION

Company: Tetra Tech
Client: Beazer East
Location: AZ
Test Well: M-40BE
Test Date: 3/21/14

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
M-40BE	2659033.238	251925.758

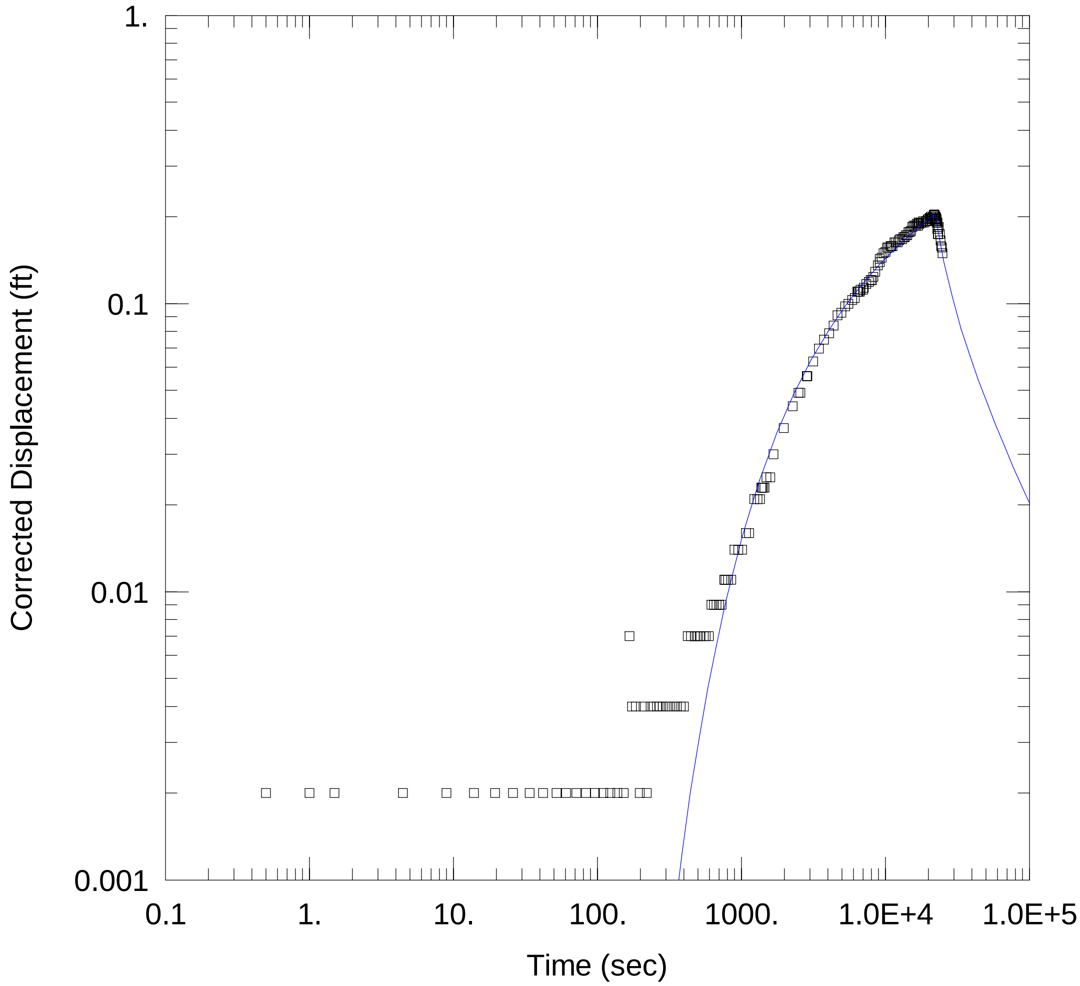
Observation Wells

Well Name	X (ft)	Y (ft)
□ M-40BE	2659033.238	251925.758

SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

T = 0.1743 cm^2/sec
S = 0.02639
Kz/Kr = 0.1
b = 17.5 ft



WELL TEST ANALYSIS

Data Set: T:\...\M-40BE Pump with PW-1 Obs.aqt
Date: 07/22/14 Time: 08:54:21

PROJECT INFORMATION

Company: Tetra Tech
Client: Beazer East
Location: AZ
Test Well: M-40BE
Test Date: 3/21/14

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
M-40BE	2659033.238	251925.758

Observation Wells

Well Name	X (ft)	Y (ft)
□ PW-1	2659041	251941

SOLUTION

Aquifer Model: Unconfined

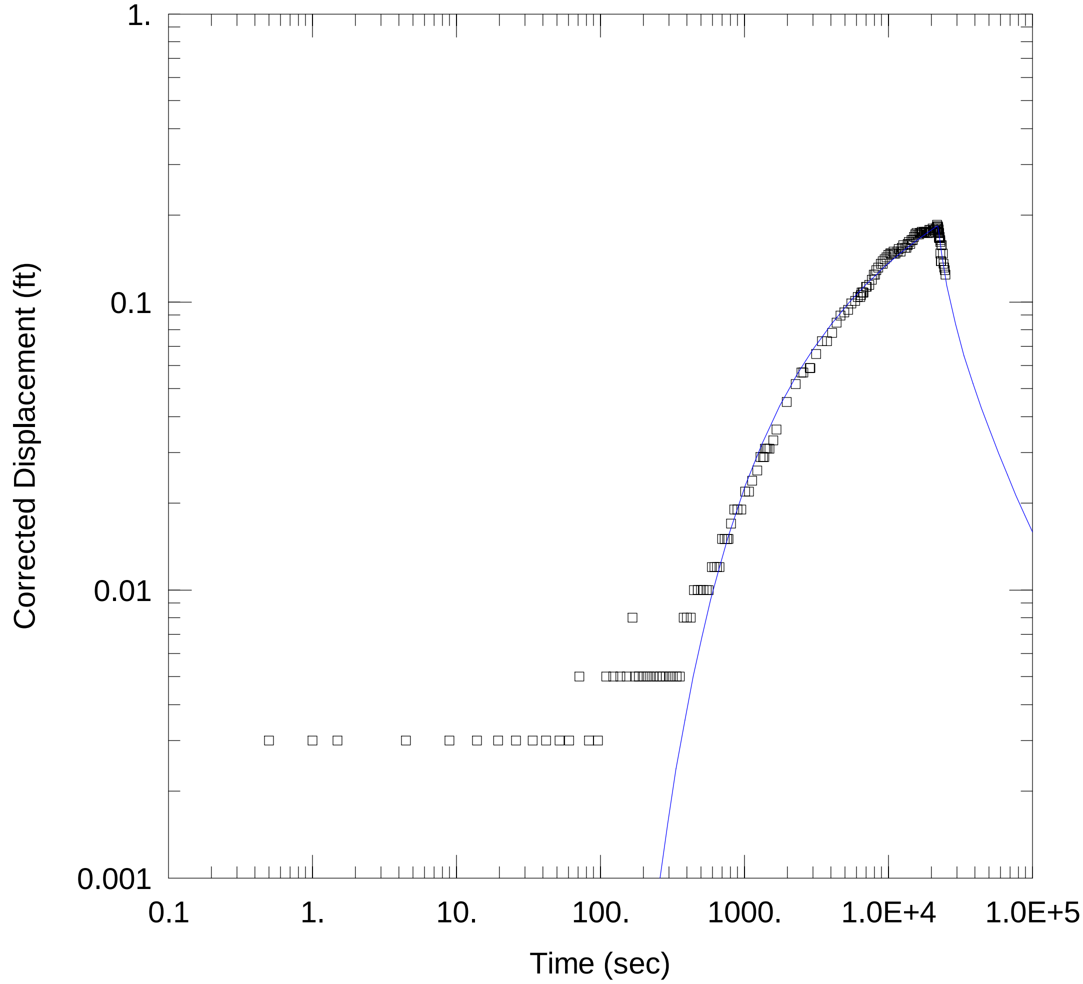
Solution Method: Theis

T = 1.971 cm^2/sec

S = 0.0326

Kz/Kr = 0.1

b = 17.5 ft



WELL TEST ANALYSIS

Data Set: T:\...\M-40BE Pump with OW-1 Obs.aqt
Date: 07/22/14 Time: 08:53:54

PROJECT INFORMATION

Company: Tetra Tech
Client: Beazer East
Location: AZ
Test Well: M-40BE
Test Date: 3/21/14

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
M-40BE	2659033.238	251925.758

Observation Wells

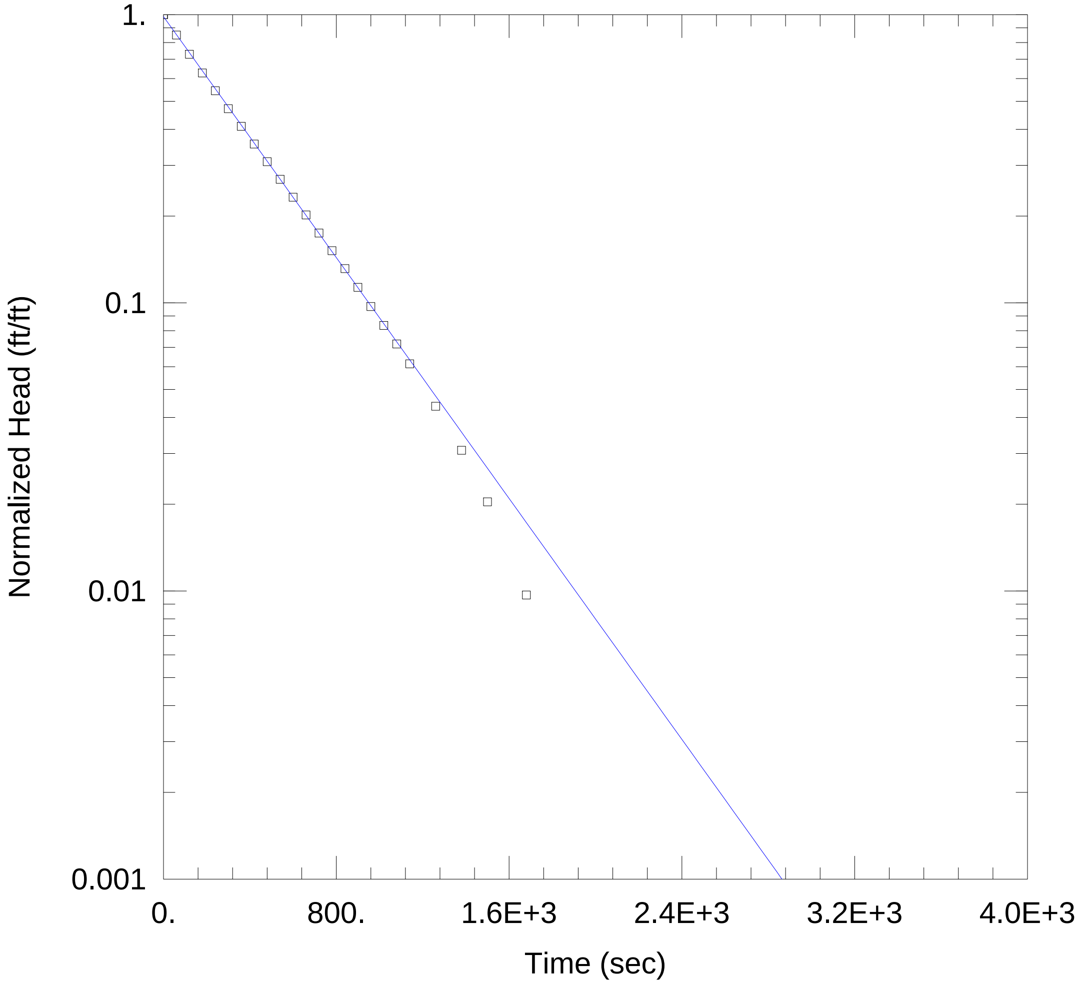
Well Name	X (ft)	Y (ft)
□ OW-1	2659053	251936

SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

T = 2.532 cm^2/sec
S = 0.01638
Kz/Kr = 0.1
b = 17.5 ft

HG-32S - Falling Head Test



SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 1.262 ft/day   y0 = 3.603 ft

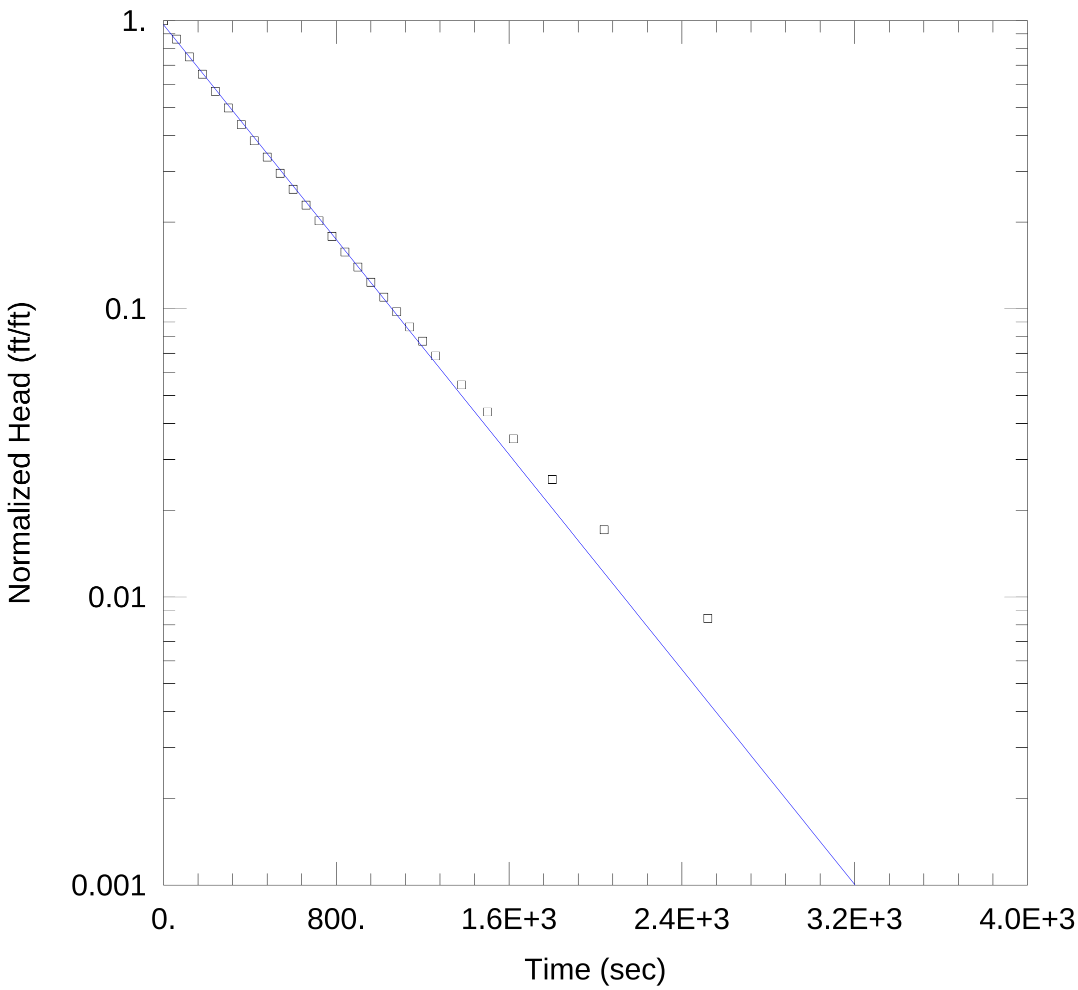
AQUIFER DATA

Saturated Thickness: 120. ft   Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (HG-32S FH)

Initial Displacement: 3.66 ft
Static Water Column Height: 8.5 ft
Total Well Penetration Depth: 46.5 ft
Screen Length: 10. ft
Casing Radius: 0.1667 ft
Well Radius: 0.1667 ft

HG-32S - Rising Head Test



SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 1.126 ft/day   y0 = 3.879 ft

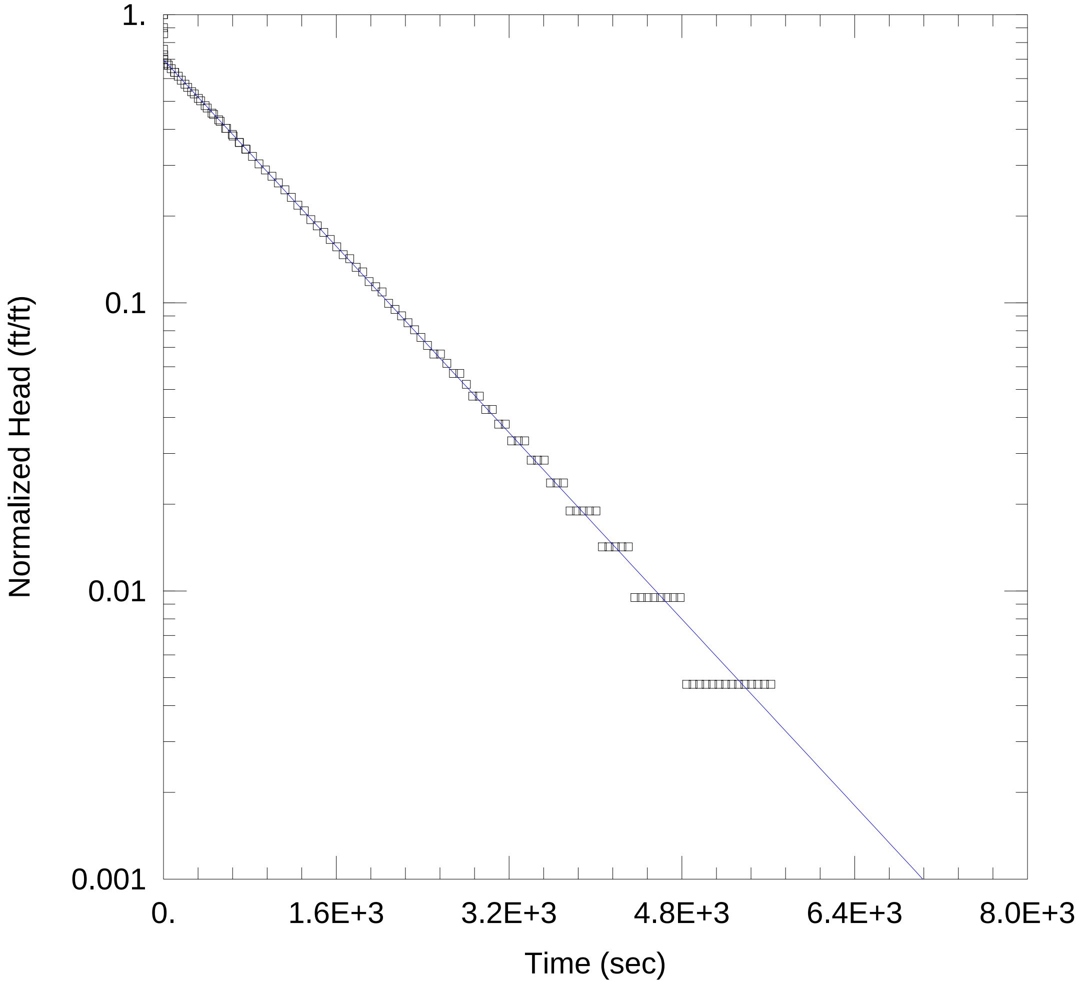
AQUIFER DATA

Saturated Thickness: 120. Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (HG-32S RH)

Initial Displacement: 4.005 ft
Static Water Column Height: 8.5 ft
Total Well Penetration Depth: 46.5 ft
Screen Length: 10. ft
Casing Radius: 0.1667 ft
Well Radius: 0.1667 ft

HG-37SE - Falling Head Test



SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 1.155 ft/day   y0 = 3.505 ft

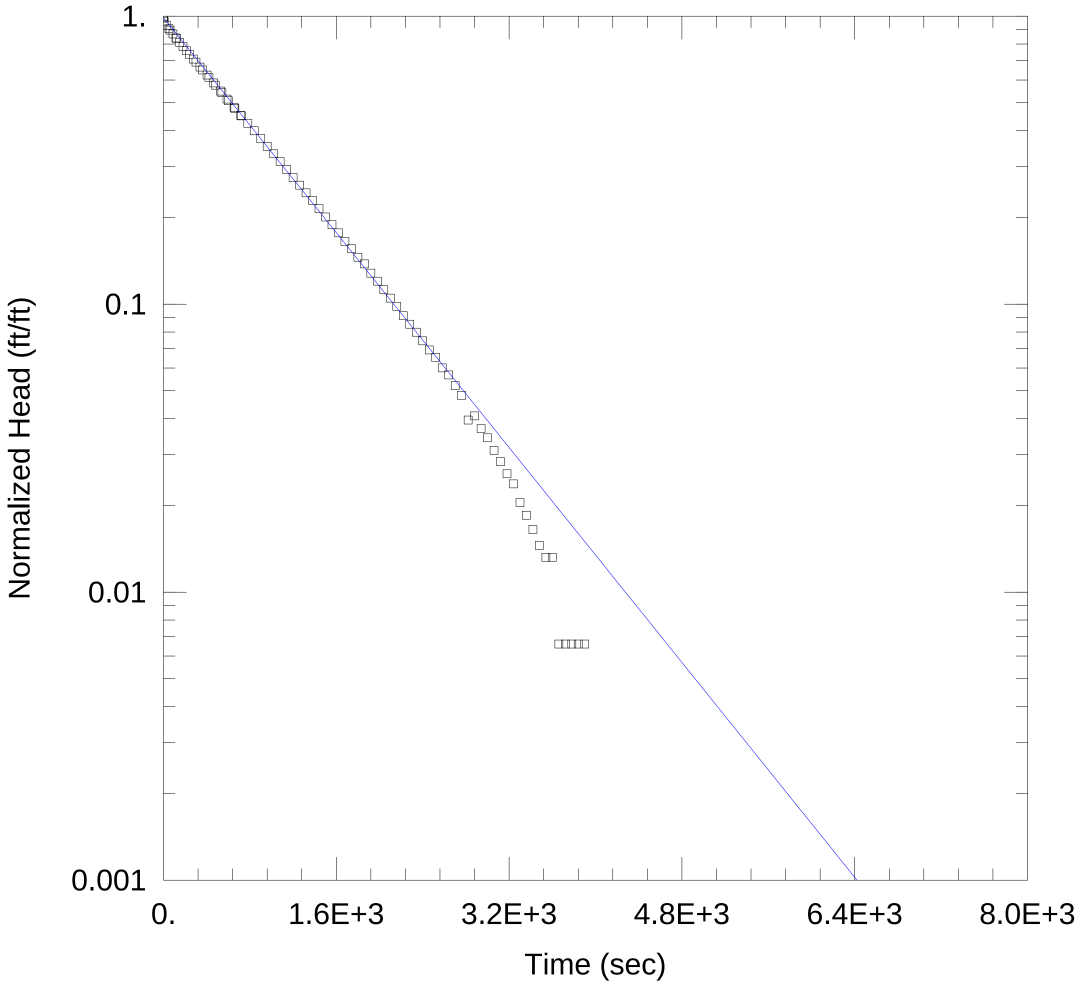
AQUIFER DATA

Saturated Thickness: 120. Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (HG-37SE FH)

Initial Displacement: 5.032 ft
Static Water Column Height: 12.54 ft
Total Well Penetration Depth: 43.5 ft
Screen Length: 15. ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

HG-37SE - Rising Head Test



SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 1.332 ft/day   y0 = 3.566 ft

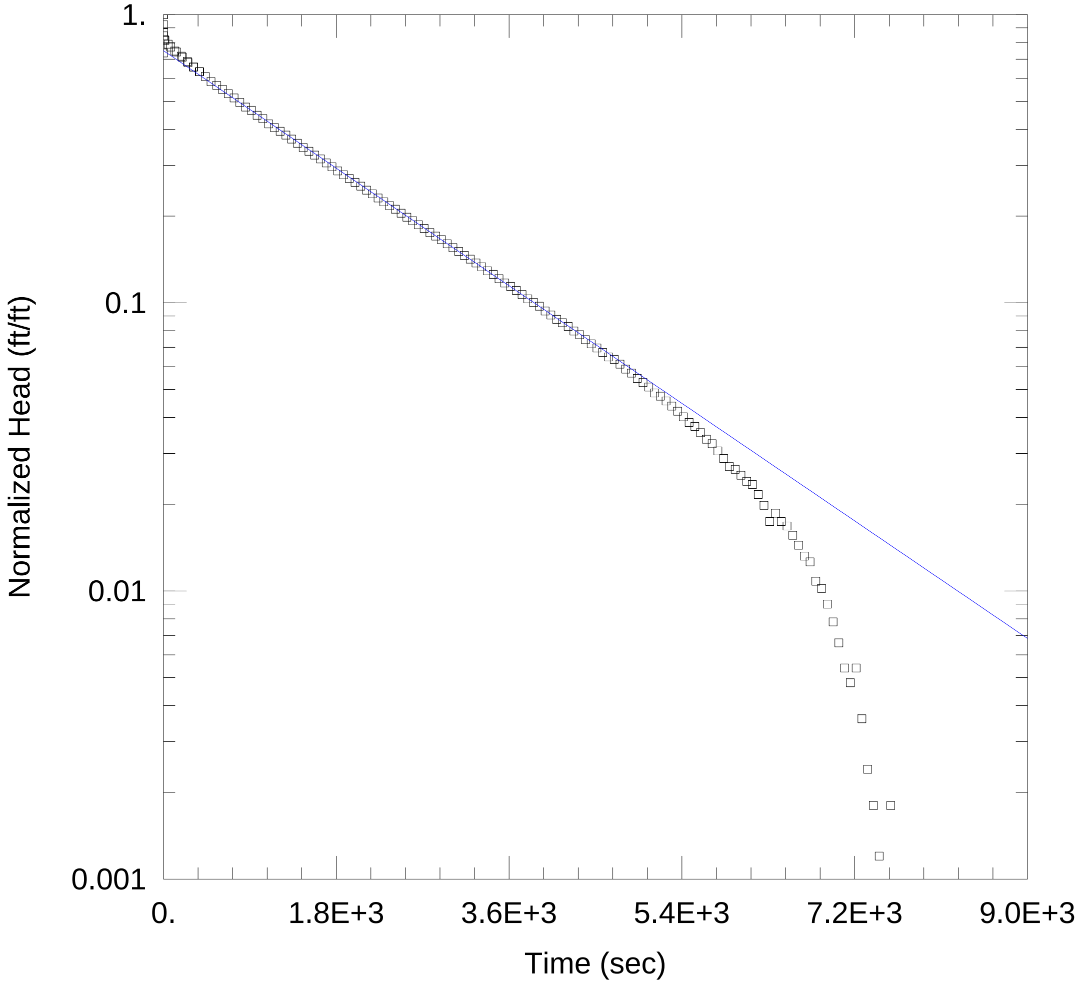
AQUIFER DATA

Saturated Thickness: 120. Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (HG-37SE RH)

Initial Displacement: 3.613 ft
Static Water Column Height: 12.54 ft
Total Well Penetration Depth: 43.5 ft
Screen Length: 15. ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

HG-38SE - Falling Head Test



SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 0.651 ft/day   y0 = 2.929 ft

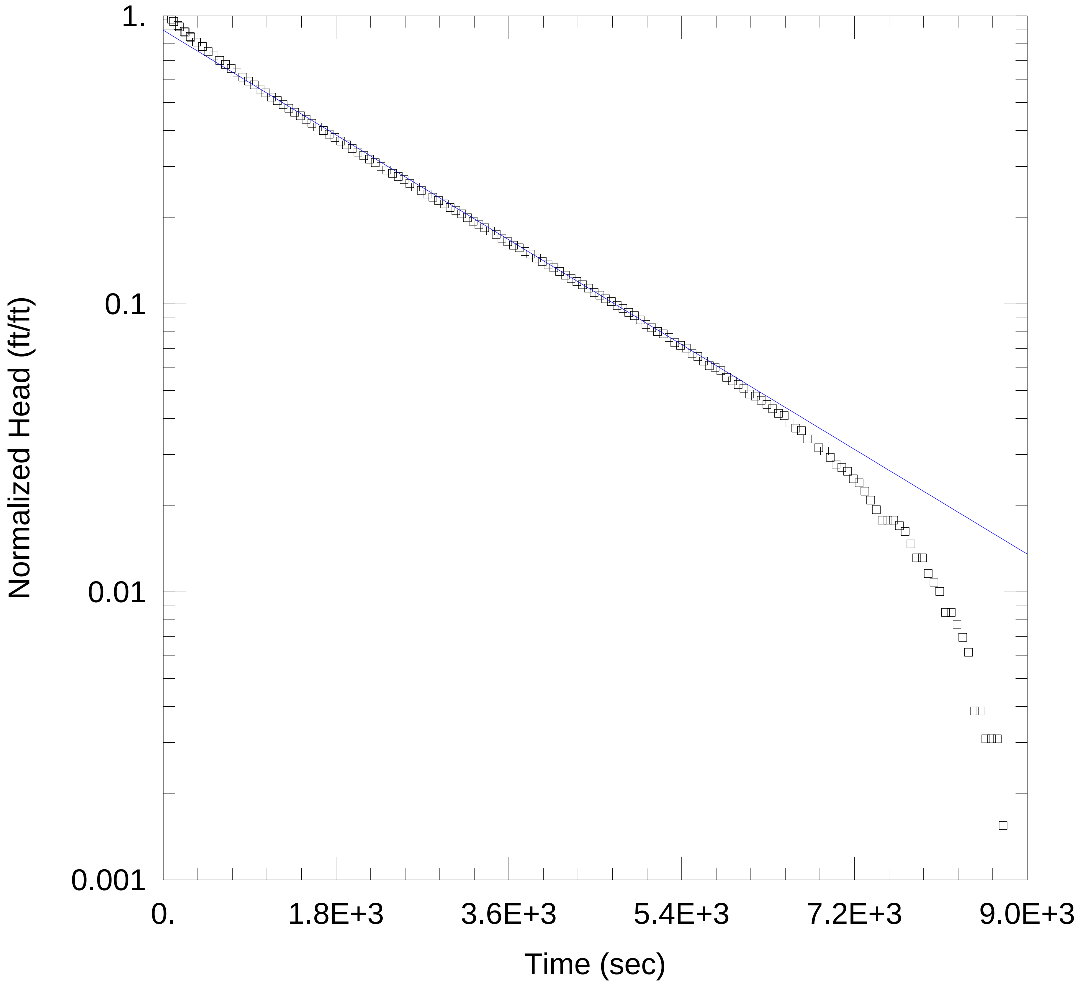
AQUIFER DATA

Saturated Thickness: 120. Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (HG-38SE FH)

Initial Displacement: 3.905 ft
Static Water Column Height: 12.72 ft
Total Well Penetration Depth: 45.6 ft
Screen Length: 15. ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

HG-38SE - Rising Head Test



SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 0.5805 ft/day   y0 = 2.708 ft

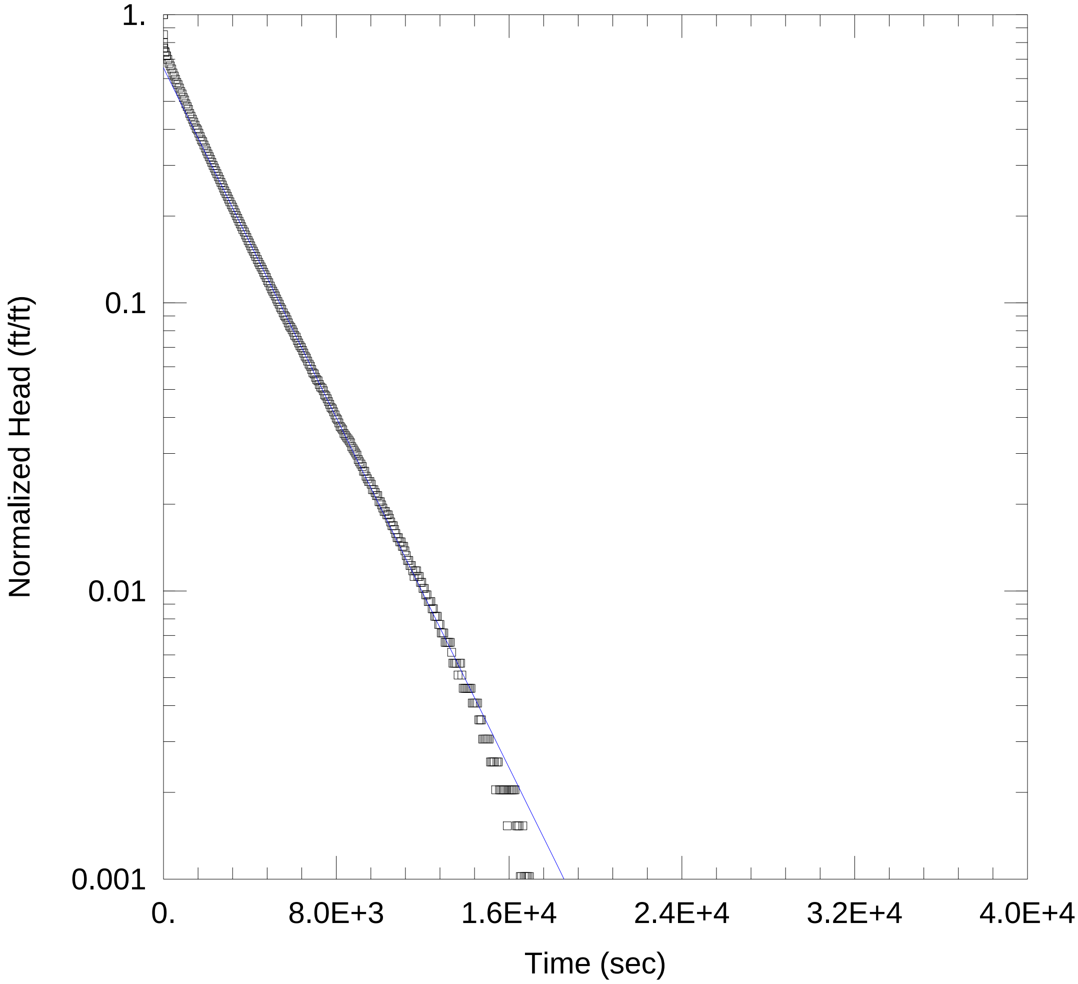
AQUIFER DATA

Saturated Thickness: 120. Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (HG-38SE RH)

Initial Displacement: 3.038 ft
Static Water Column Height: 12.72 ft
Total Well Penetration Depth: 45.6 ft
Screen Length: 15. ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

HG-39SE - Falling Head Test



SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 0.4348 ft/day   y0 = 3.053 ft

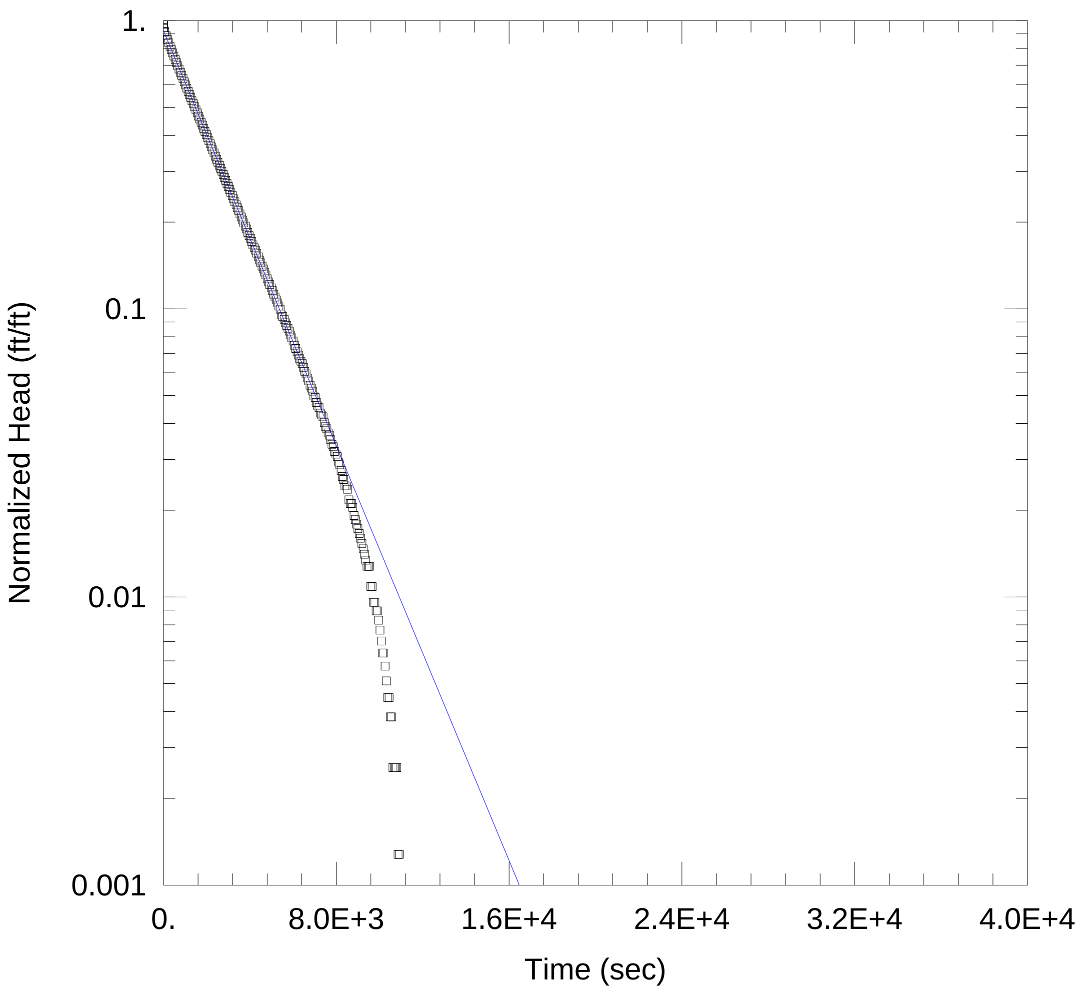
AQUIFER DATA

Saturated Thickness: 120. Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (HG-39SE FH)

Initial Displacement: 4.674 ft
Static Water Column Height: 12.72 ft
Total Well Penetration Depth: 44.6 ft
Screen Length: 15. ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

HG-39SE - Rising Head Test



SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 0.5156 ft/day   y0 = 3.442 ft

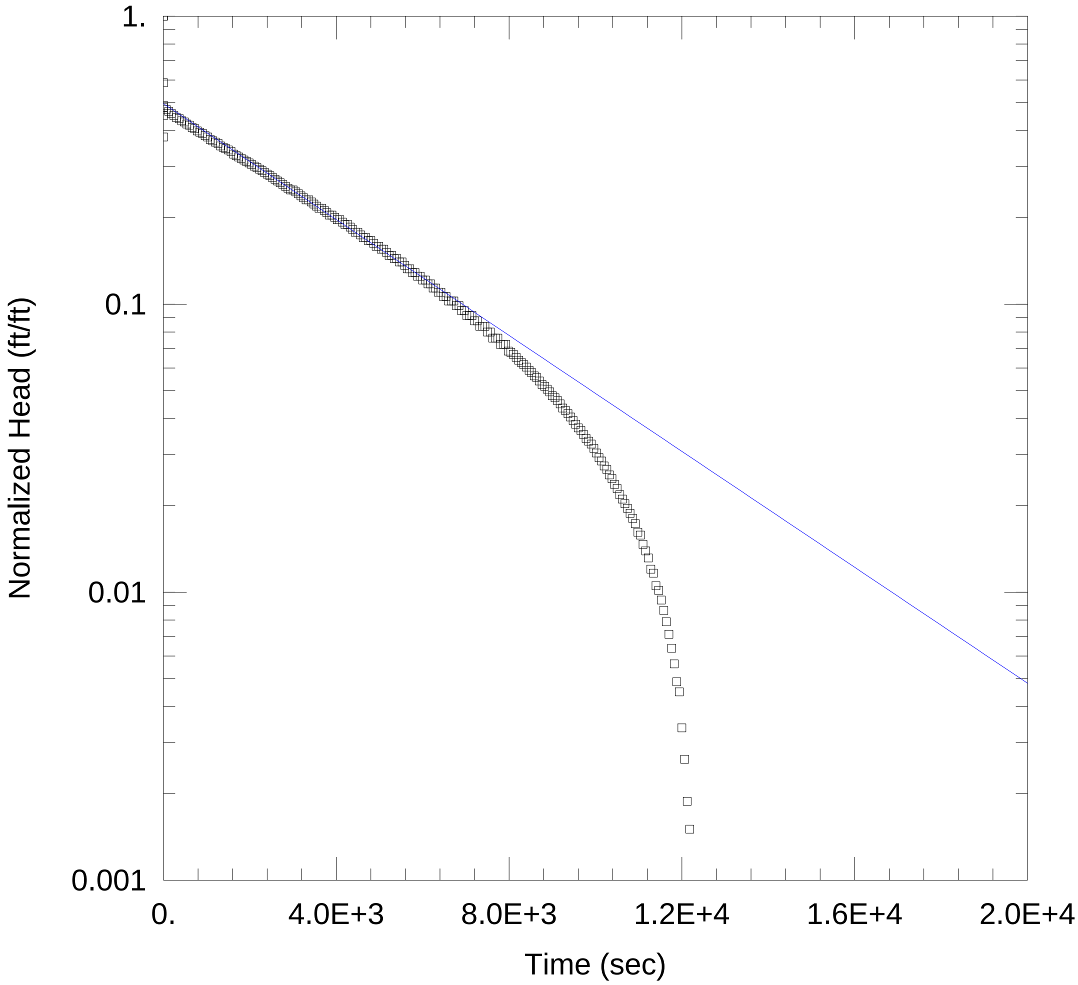
AQUIFER DATA

Saturated Thickness: 120. Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (HG-39SE RH)

Initial Displacement: 3.732 ft
Static Water Column Height: 12.72 ft
Total Well Penetration Depth: 44.6 ft
Screen Length: 15. ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

HG-40SE - Falling Head Test



SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 0.2934 ft/day   y0 = 3.154 ft

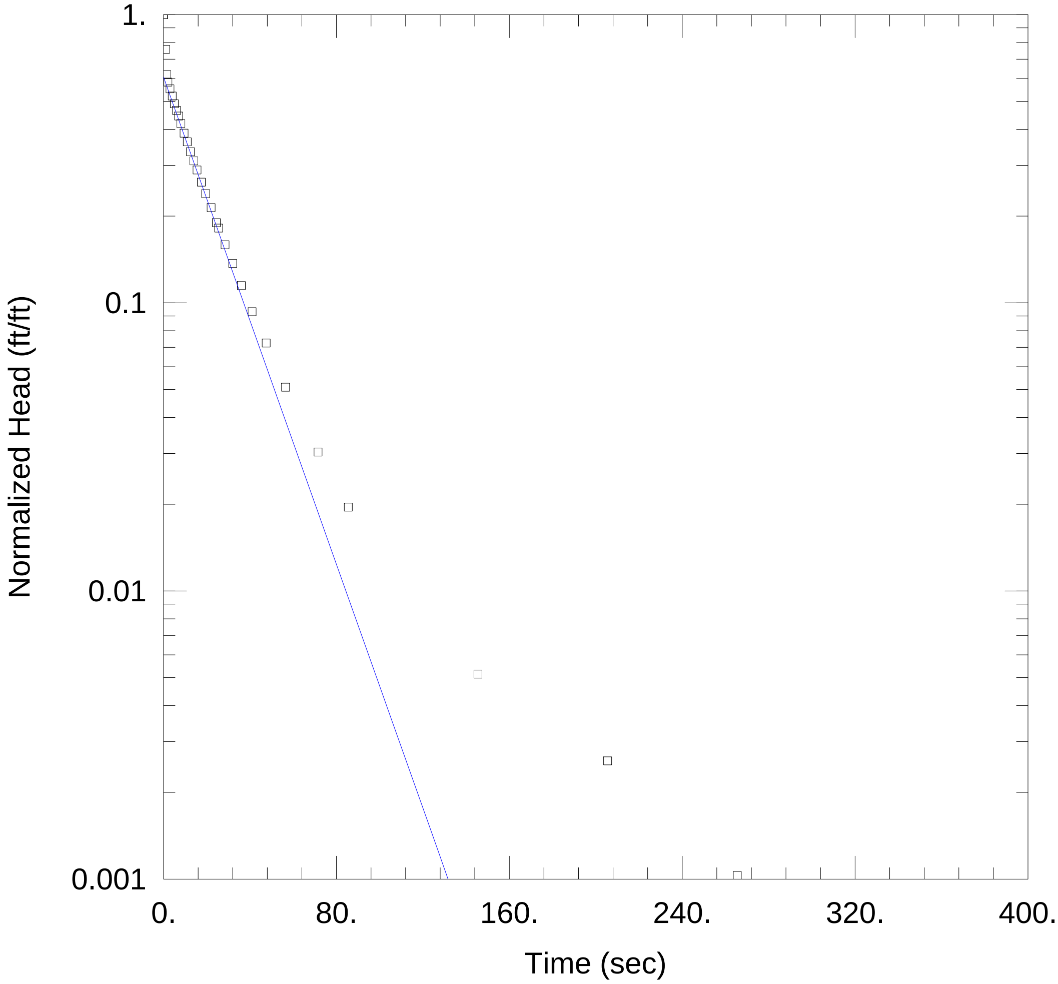
AQUIFER DATA

Saturated Thickness: 120. Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (HG-40SE FH)

Initial Displacement: 6.351 ft
Static Water Column Height: 11.95 ft
Total Well Penetration Depth: 52.1 ft
Screen Length: 15. ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

M-38BE - Falling Head Test



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 45.95 ft/day   y0 = 2.764 ft

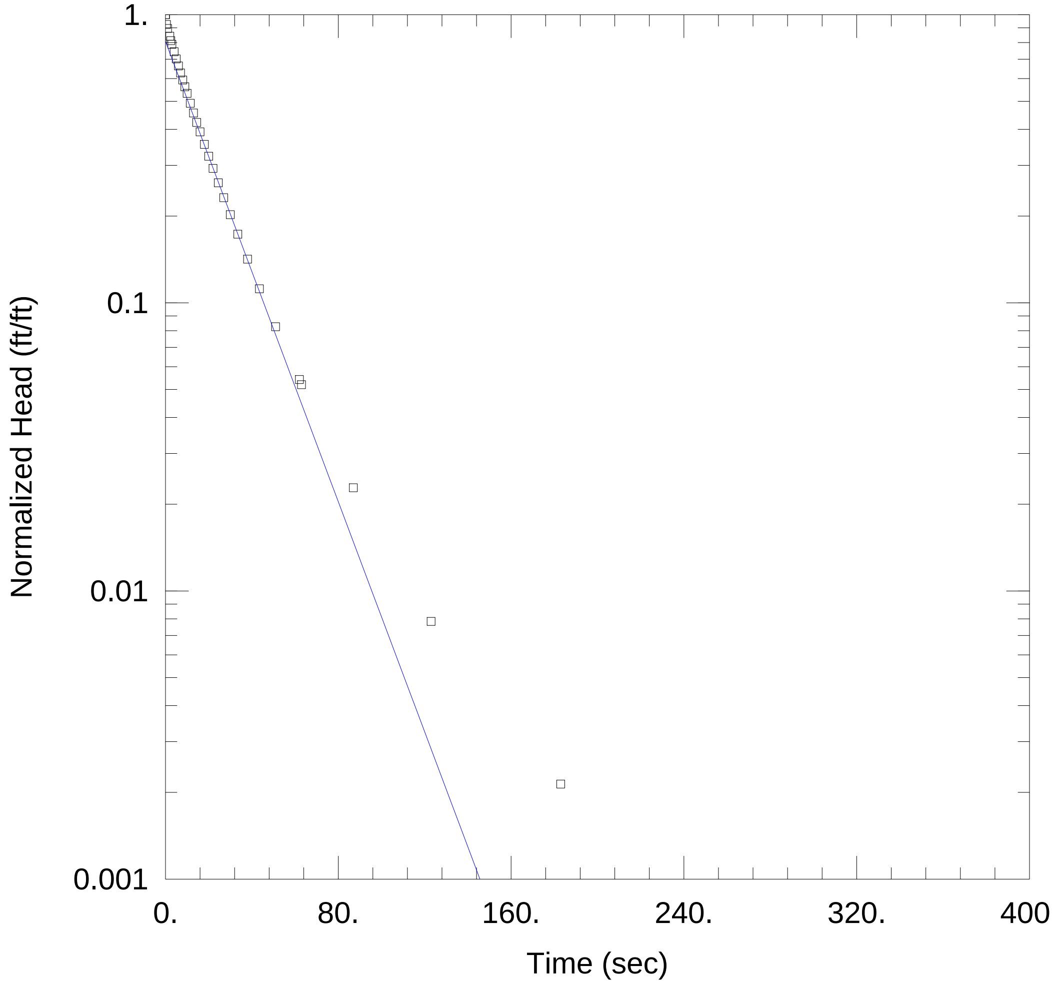
AQUIFER DATA

Saturated Thickness: 8.71 Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (M-38BE FH)

Initial Displacement: 4.557 ft
Static Water Column Height: 11.29 ft
Total Well Penetration Depth: 14.7 ft
Screen Length: 14.7 ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

M-38BE - Rising Head Test



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 43.42 ft/day y0 = 2.657 ft

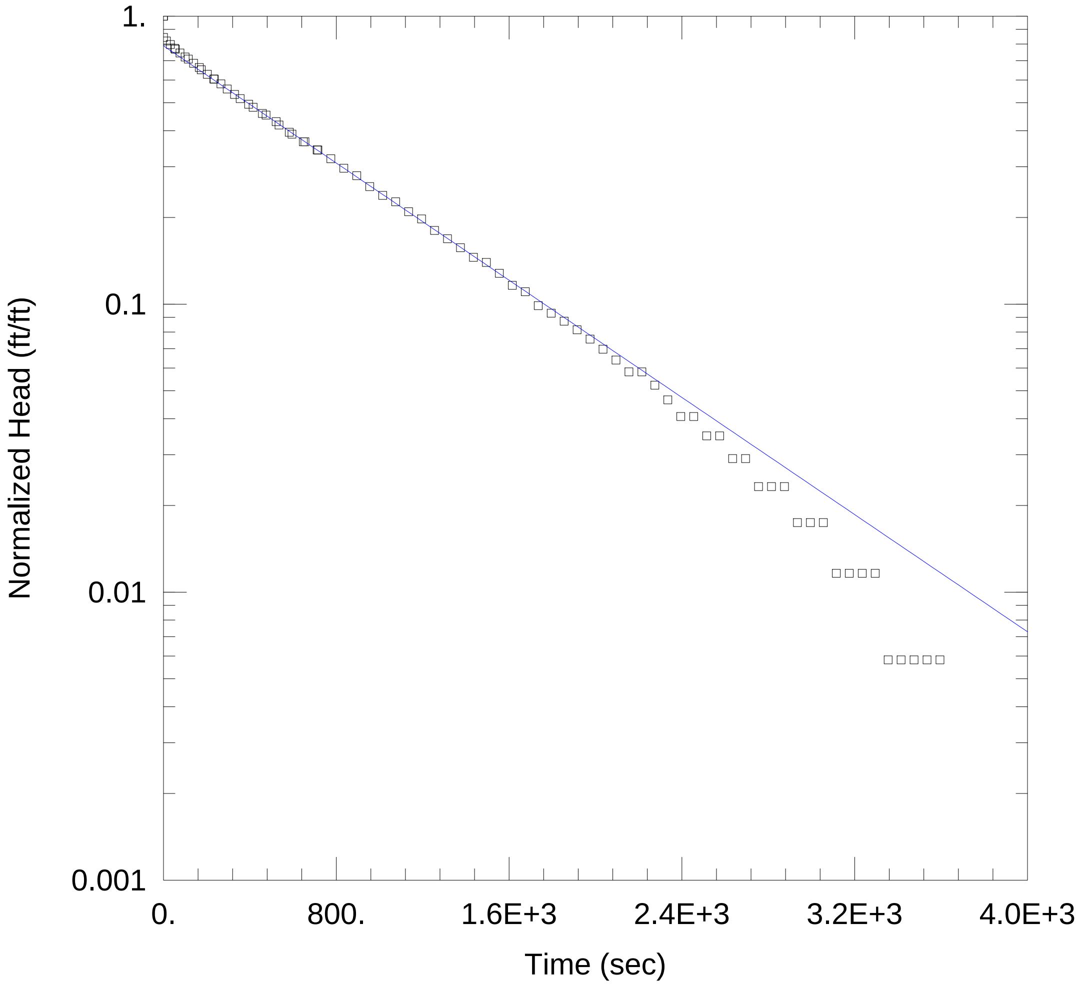
AQUIFER DATA

Saturated Thickness: 8.71 Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (M-38BE RH)

Initial Displacement: 3.291 ft
Static Water Column Height: 11.29 ft
Total Well Penetration Depth: 14.7 ft
Screen Length: 14.7 ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

M-39BE - Falling Head Test



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 1.517 ft/day   y0 = 3.234 ft

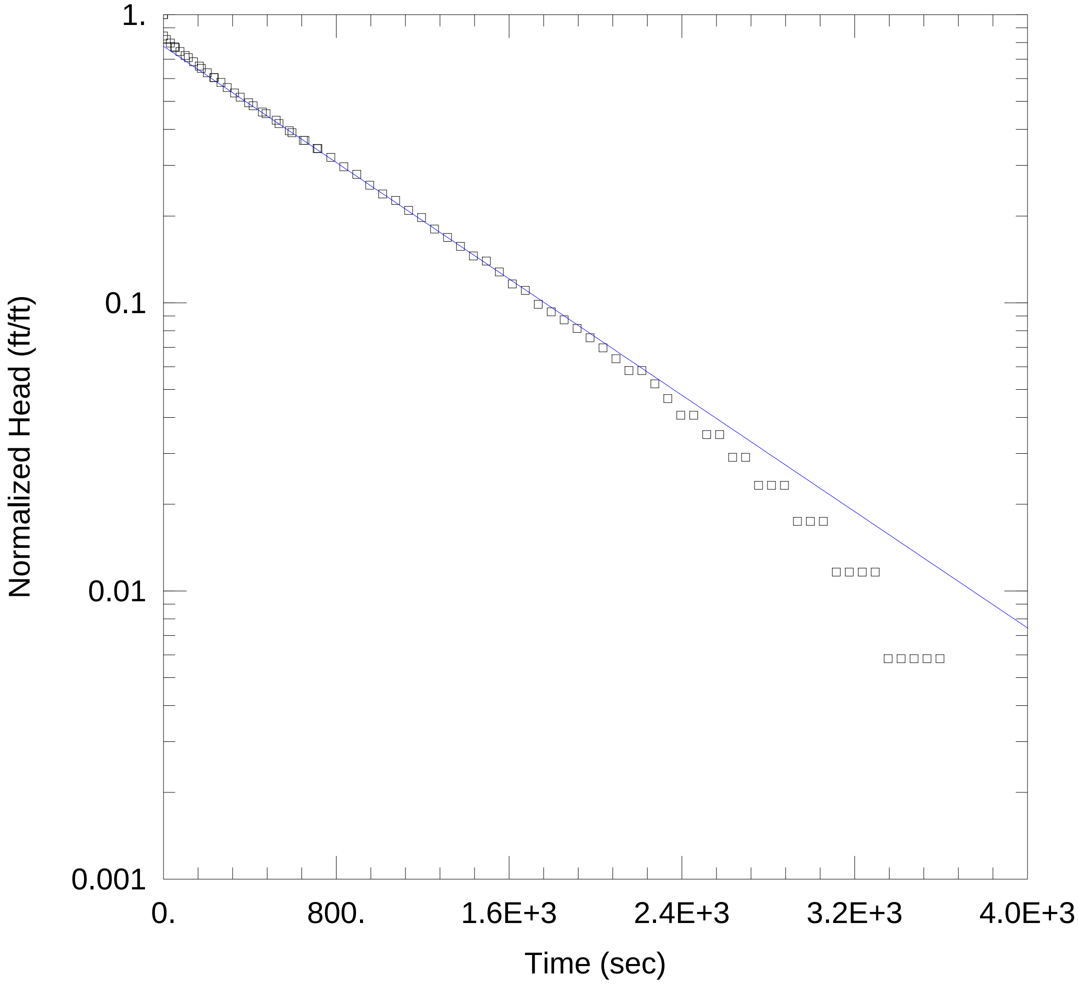
AQUIFER DATA

Saturated Thickness: 7.75 Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (M-39BE FH)

Initial Displacement: 4.102 ft
Static Water Column Height: 12.25 ft
Total Well Penetration Depth: 12.3 ft
Screen Length: 10. ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

M-39BE - Rising Head Test



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 1.505 ft/day   y0 = 3.188 ft

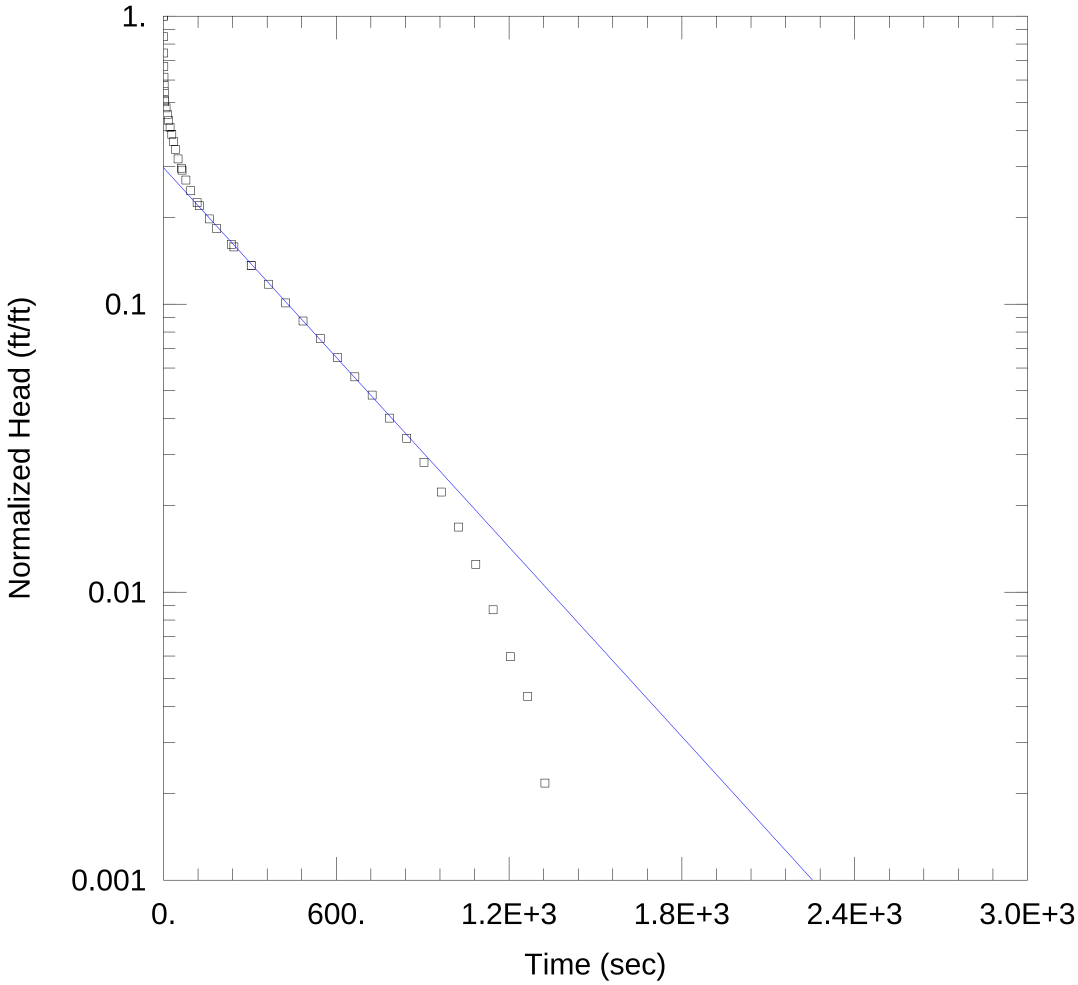
AQUIFER DATA

Saturated Thickness: 7.75 Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (M-39BE RH)

Initial Displacement: 4.102 ft
Static Water Column Height: 12.25 ft
Total Well Penetration Depth: 12.3 ft
Screen Length: 10. ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

M-40BE - Falling Head Test



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 4.386 ft/day   y0 = 1.307 ft

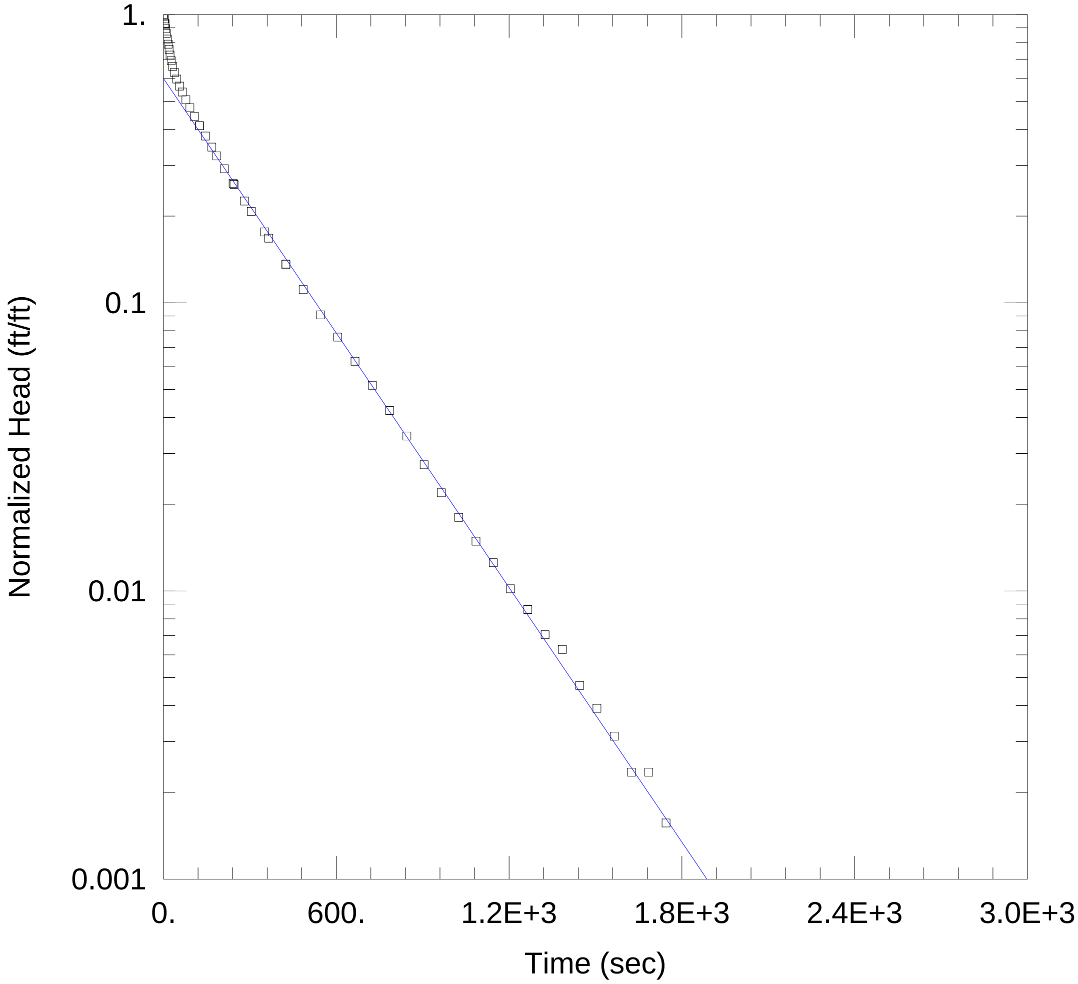
AQUIFER DATA

Saturated Thickness: 9.52 Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (M-40BE FH)

Initial Displacement: 4.393 ft
Static Water Column Height: 10.48 ft
Total Well Penetration Depth: 9. ft
Screen Length: 9. ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

M-40BE - Rising Head Test



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 5.883 ft/day y0 = 1.827 ft

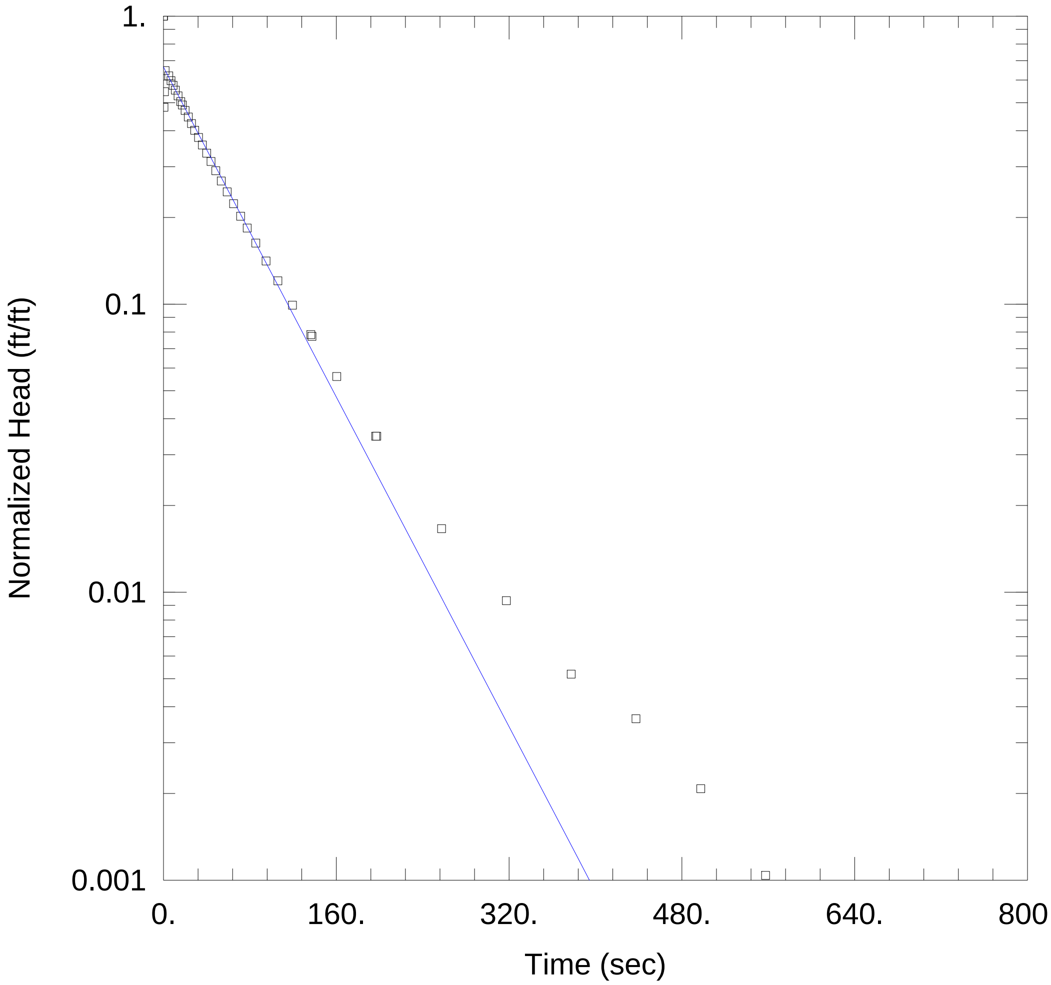
AQUIFER DATA

Saturated Thickness: 9.52 Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (M-40BE RH)

Initial Displacement: 3.045 ft
Static Water Column Height: 10.48 ft
Total Well Penetration Depth: 9. ft
Screen Length: 9. ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

M-41BE - Falling Head Test



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 19.3 ft/day   y0 = 3.004 ft

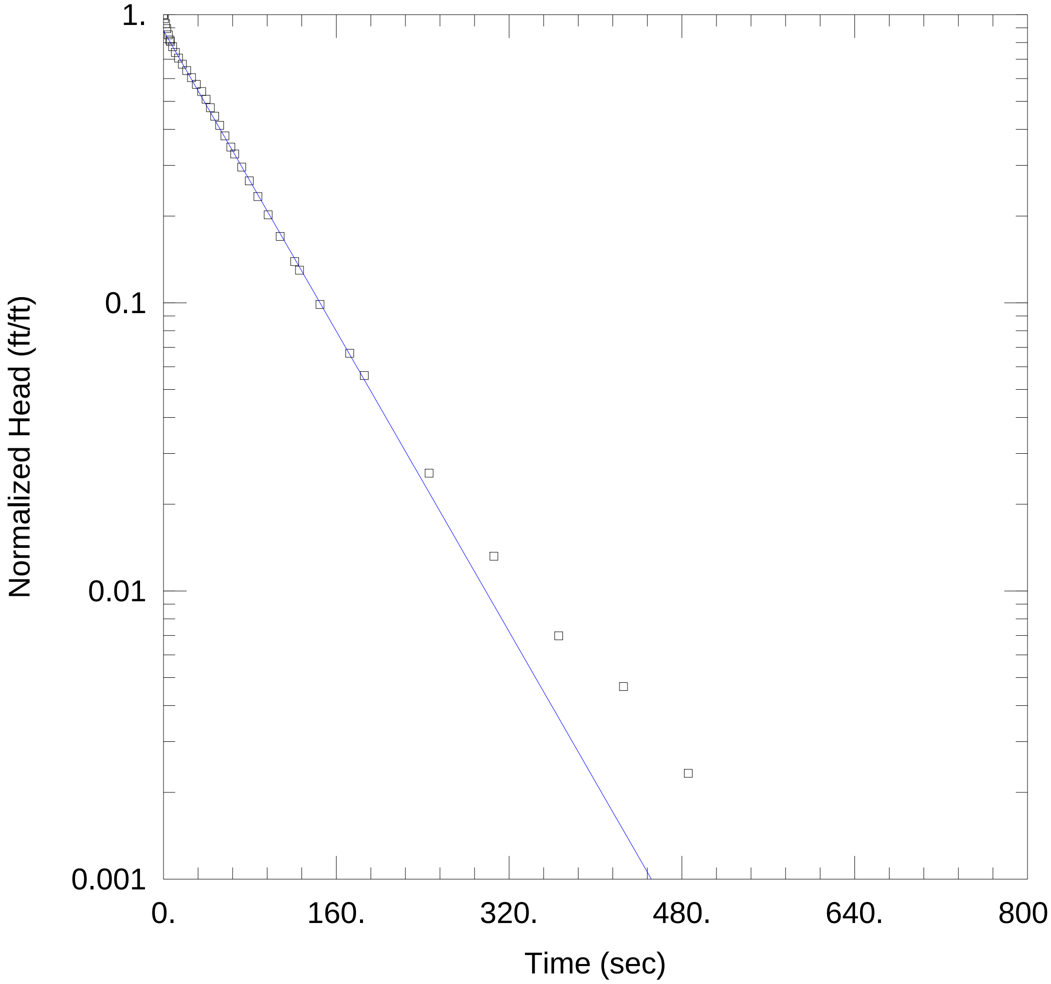
AQUIFER DATA

Saturated Thickness: 10.2 Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (M-41BE FH)

Initial Displacement: 4.517 ft
Static Water Column Height: 9.71 ft
Total Well Penetration Depth: 10.8 ft
Screen Length: 10.8 ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

M-41BE - Rising Head Test



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 17.58 ft/day
y0 = 2.657 ft

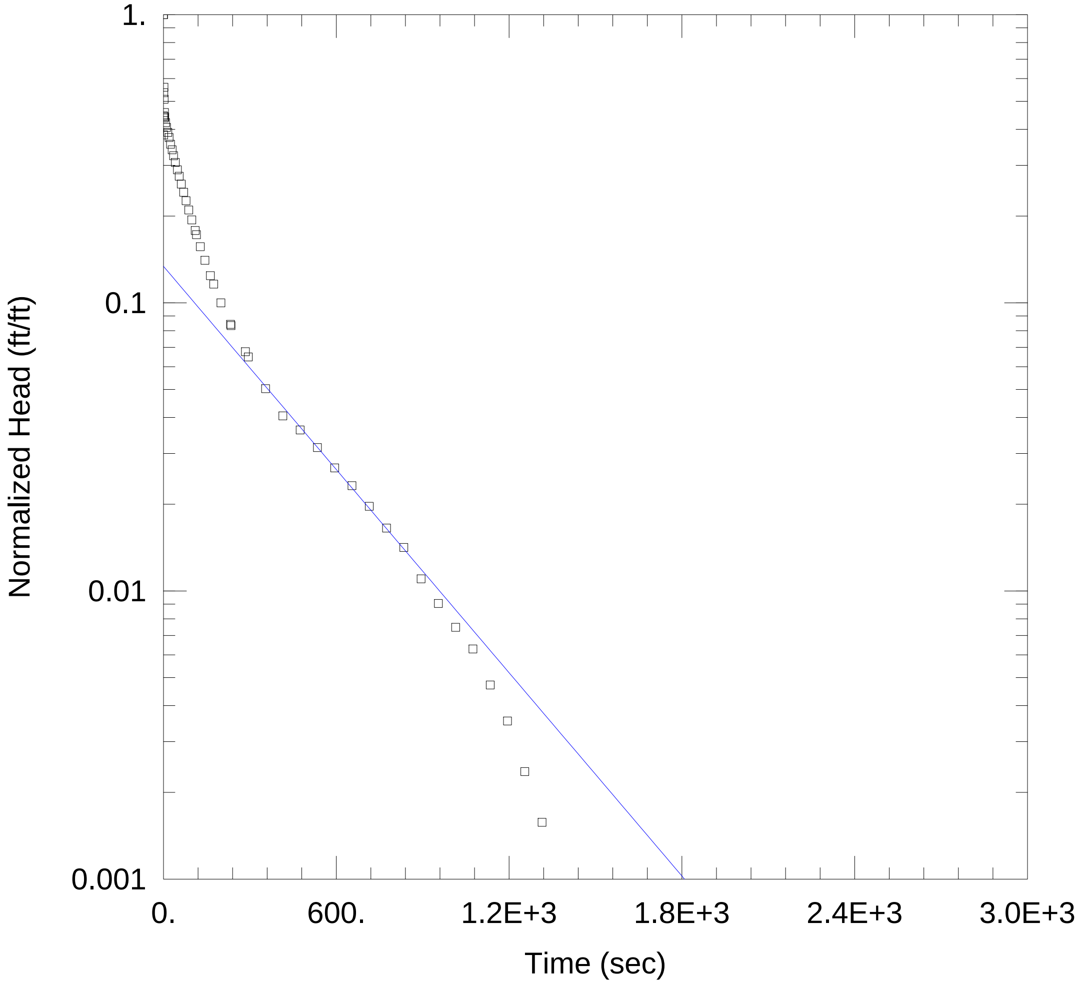
AQUIFER DATA

Saturated Thickness: 10.2 Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (M-41BE RH)

Initial Displacement: 3.019 ft
Static Water Column Height: 9.71 ft
Total Well Penetration Depth: 10.8 ft
Screen Length: 10.8 ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

M-42BE - Falling Head Test



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 3.407 ft/day   y0 = 0.8114 ft

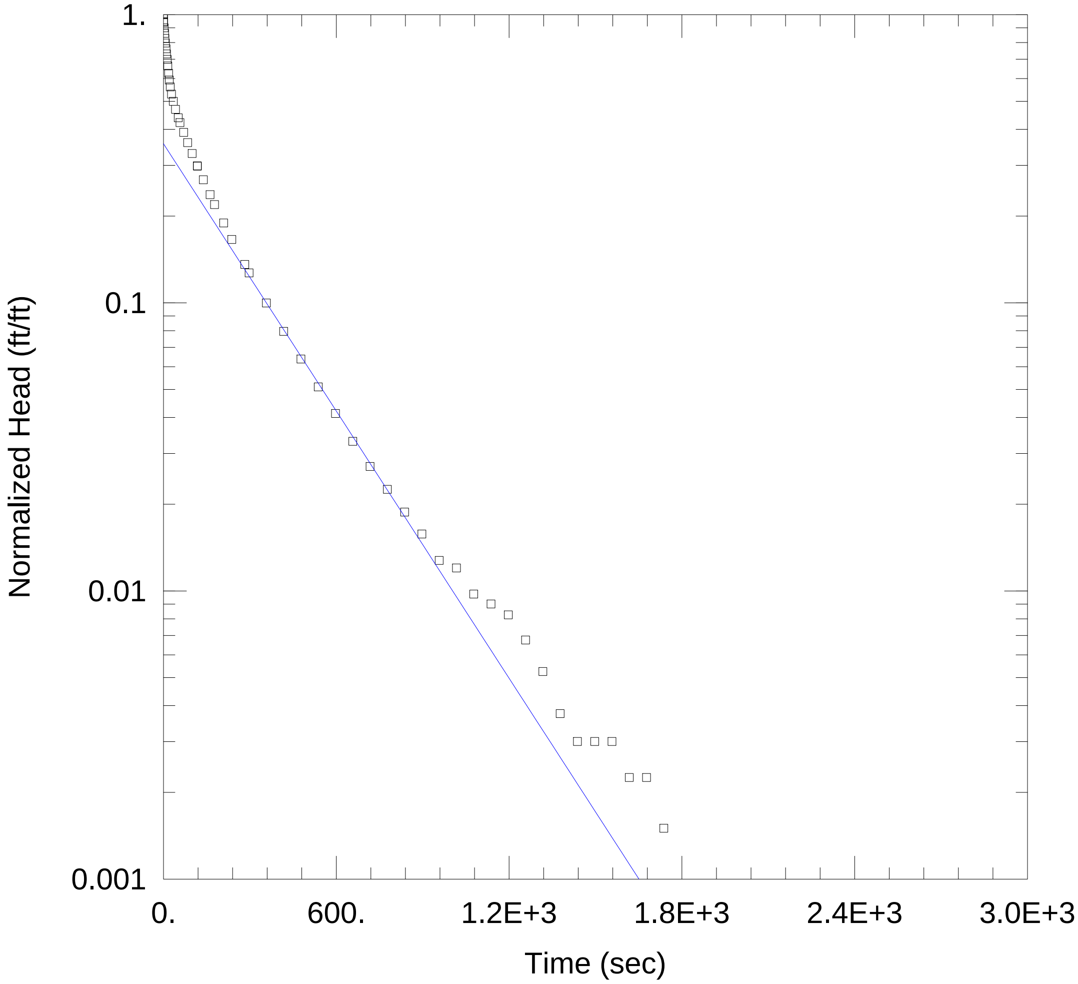
AQUIFER DATA

Saturated Thickness: 9.2 fAnisotropy Ratio (Kz/Kr): 0.1

WELL DATA (M-42BE FH)

Initial Displacement: 6.065 ft
Static Water Column Height: 10.8 ft
Total Well Penetration Depth: 9.7 ft
Screen Length: 9.7 ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

M-42BE - Rising Head Test



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 4.481 ft/day   y0 = 1.132 ft

AQUIFER DATA

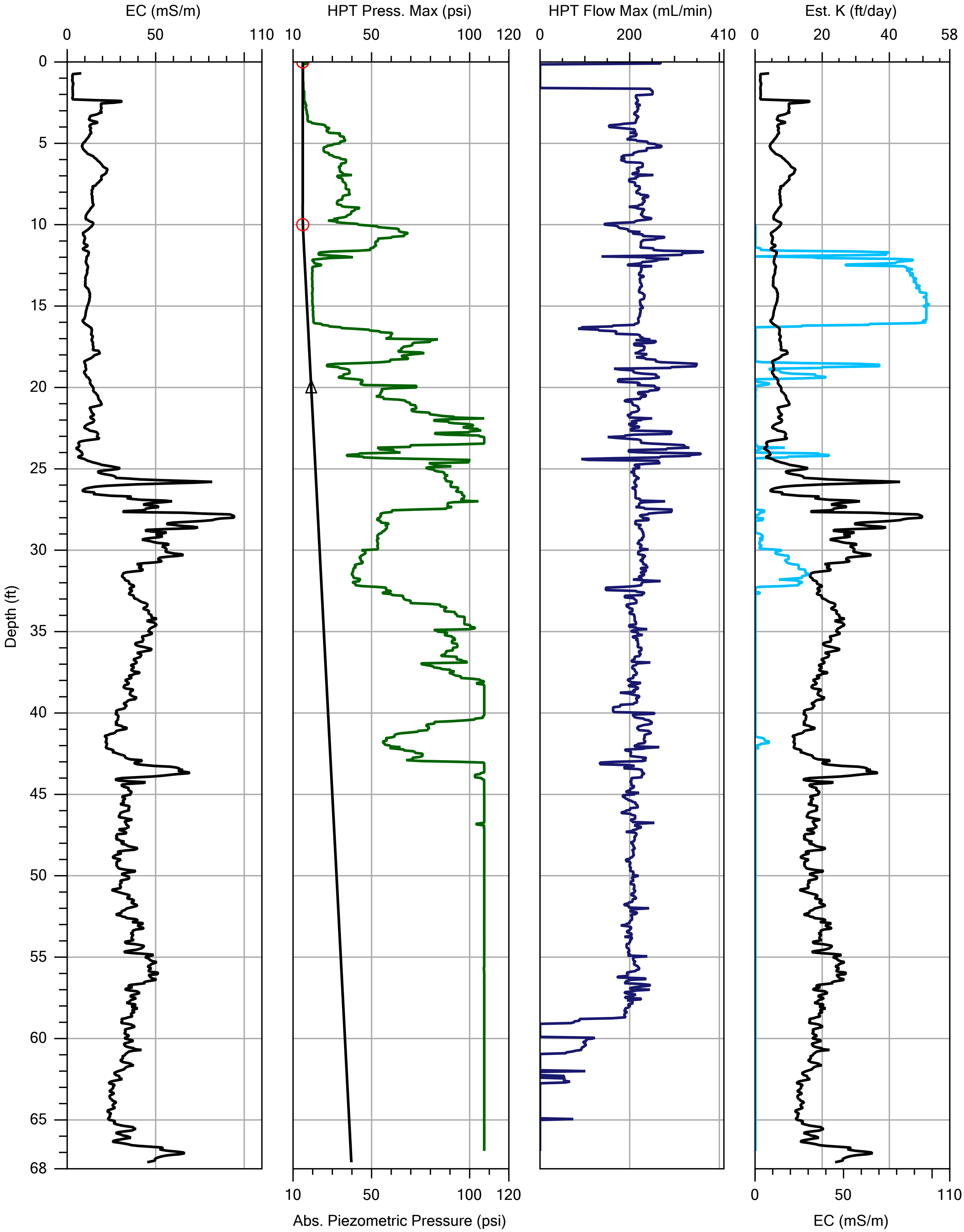
Saturated Thickness: 9.2 fAnisotropy Ratio (Kz/Kr): 0.1

WELL DATA (M-42BE RH)

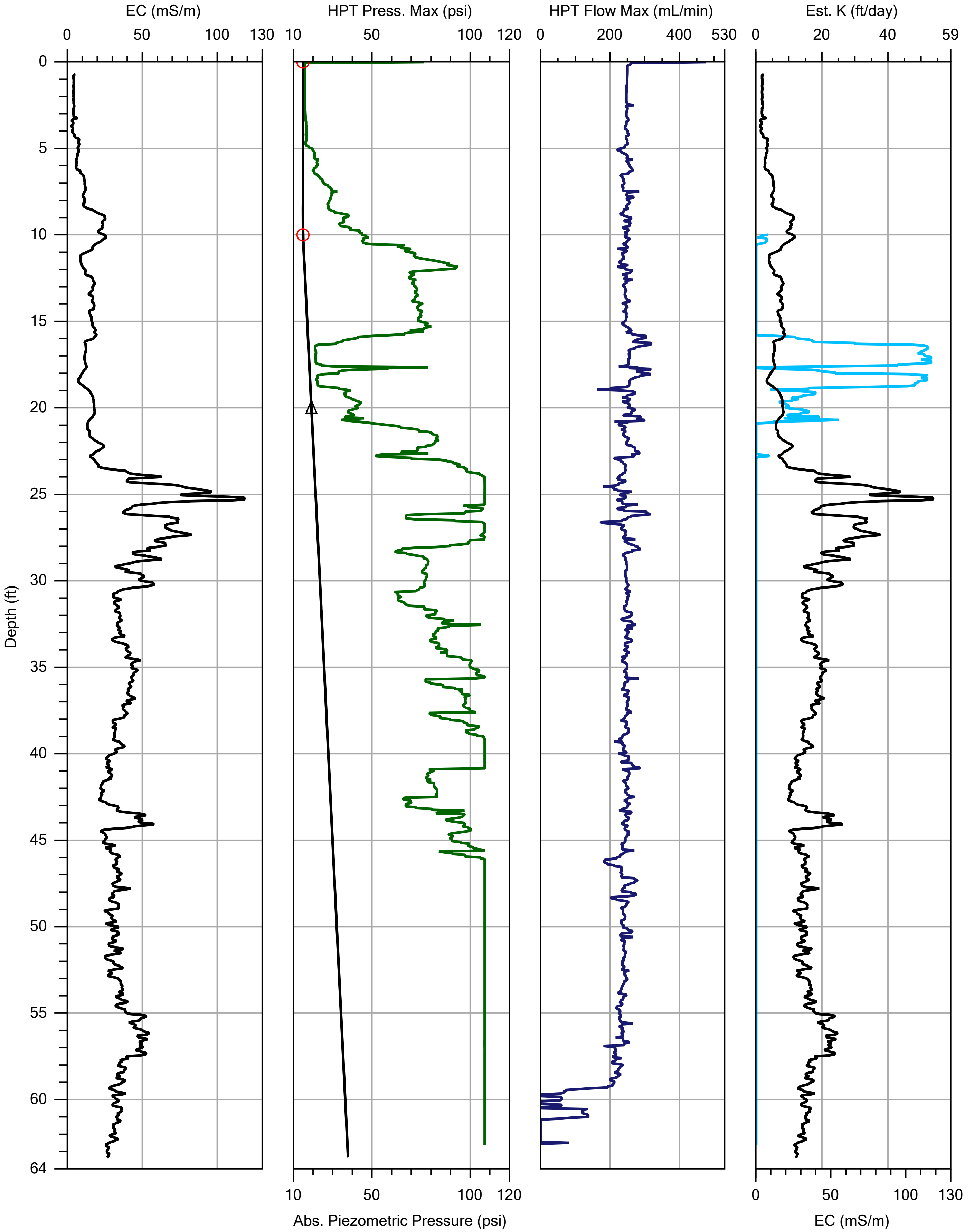
Initial Displacement: 3.177 ft
Static Water Column Height: 10.8 ft
Total Well Penetration Depth: 9.7 ft
Screen Length: 9.7 ft
Casing Radius: 0.3333 ft
Well Radius: 0.3333 ft

APPENDIX B

HYDRAULIC PROFILE TOOL RESULTS

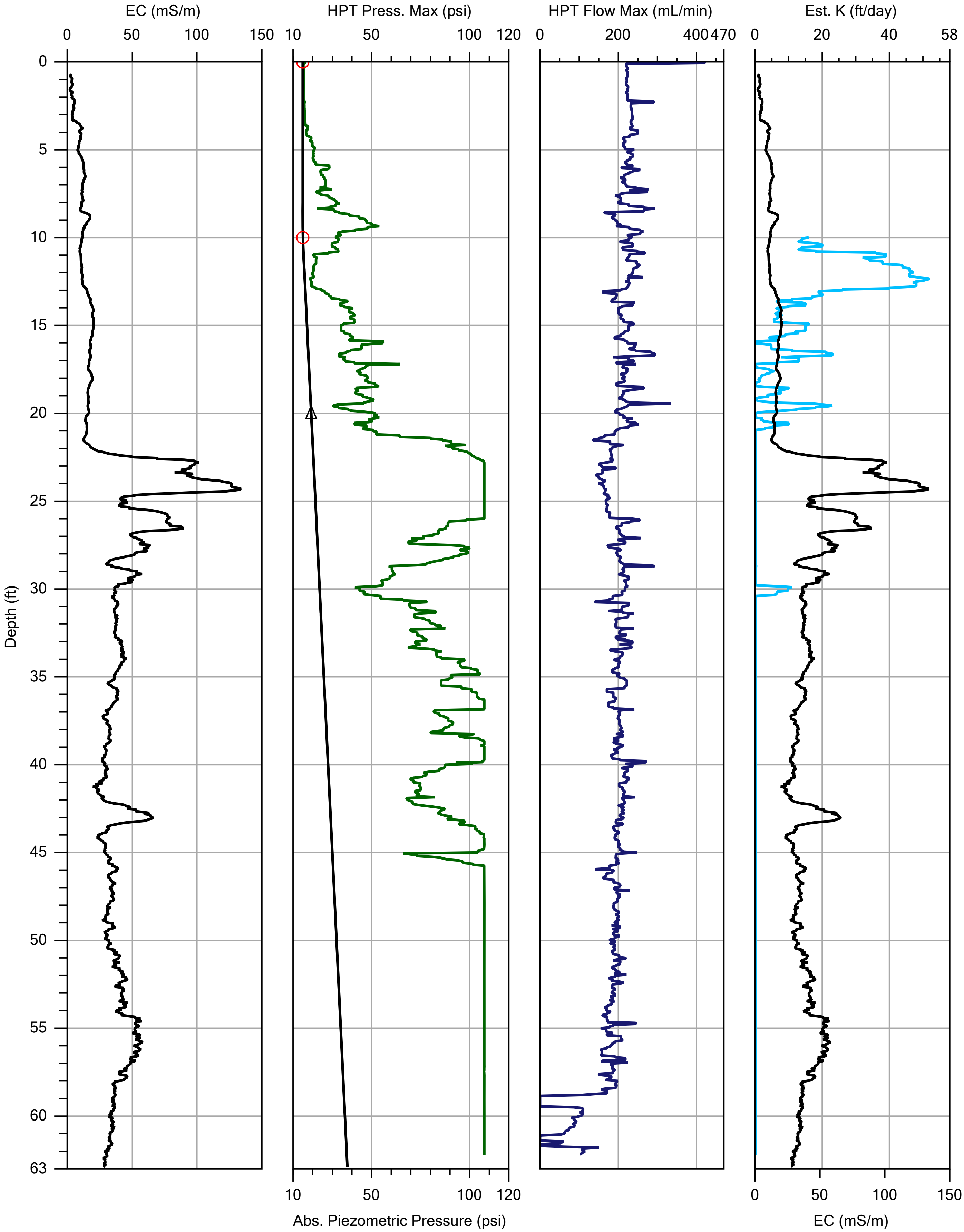


		File: HPT1.DAT
Company: Vironex, Inc.	Operator: Ryan Mulford	Date: 3/25/2014
Project ID: ISGS Pilot	Client: Tetra Tech	Location:



VIRONEX

		File: HPT4.DAT
Company: Vironex, Inc.	Operator: Ryan Mulford	Date: 3/25/2014
Project ID: ISGS Pilot	Client: Tetra Tech	Location:

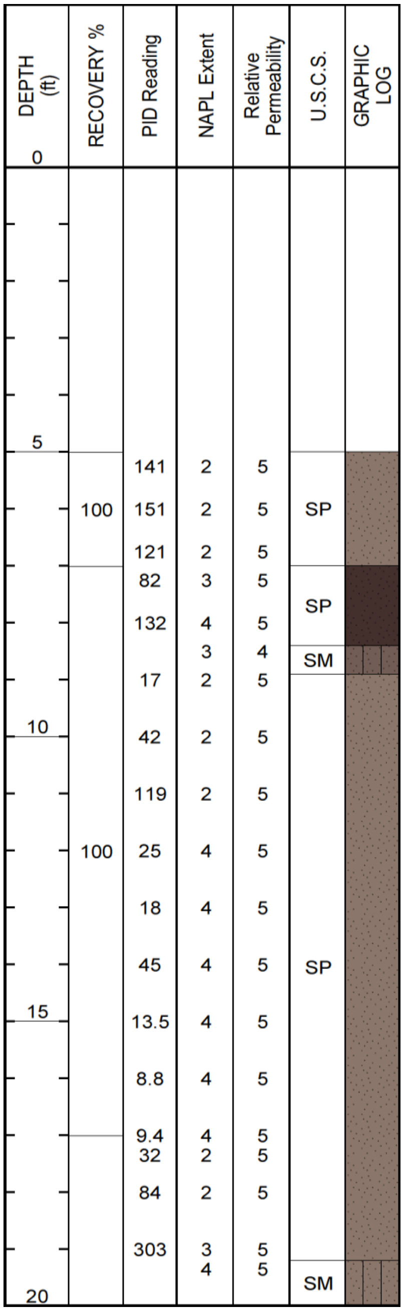


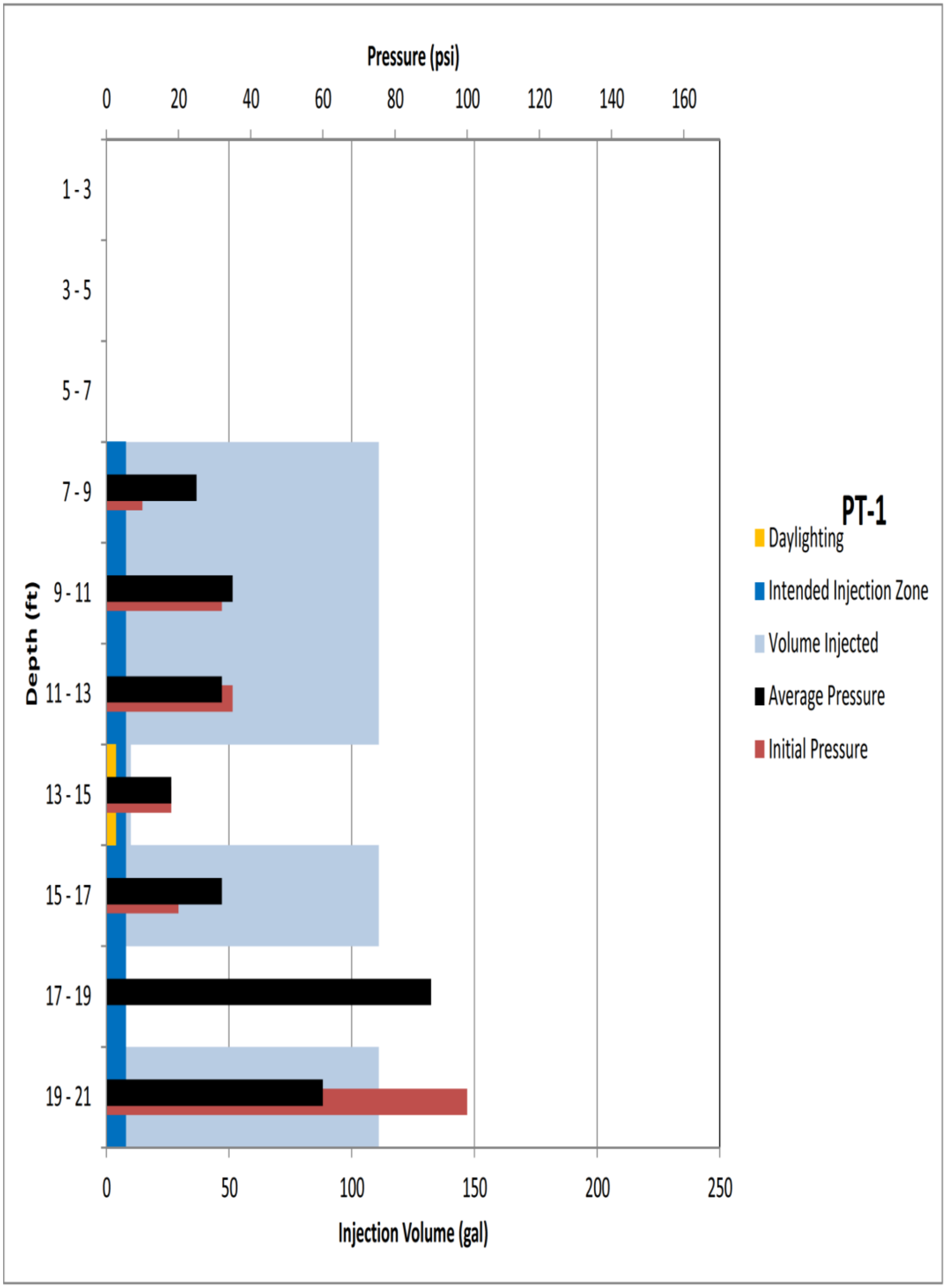
VIRONEX

		File: HPT5.DAT
Company: Vironex, Inc.	Operator: Ryan Mulford	Date: 3/24/2014
Project ID: ISGS Pilot	Client: Tetra Tech	Location:

APPENDIX C

INJECTION VOLUMES AND FLOW RATES





TITLE:

**REAGENT VOLUME INJECTED INTO PT-1
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

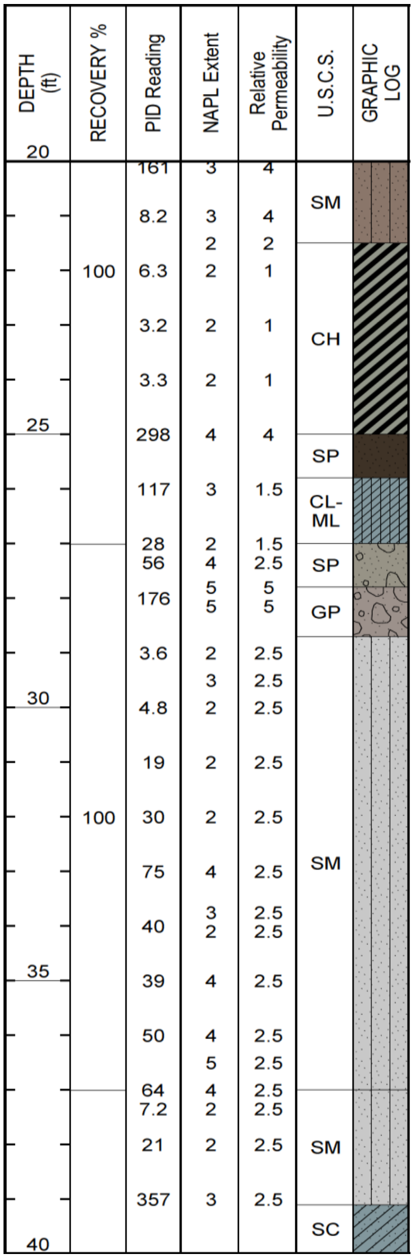
LOCATION:

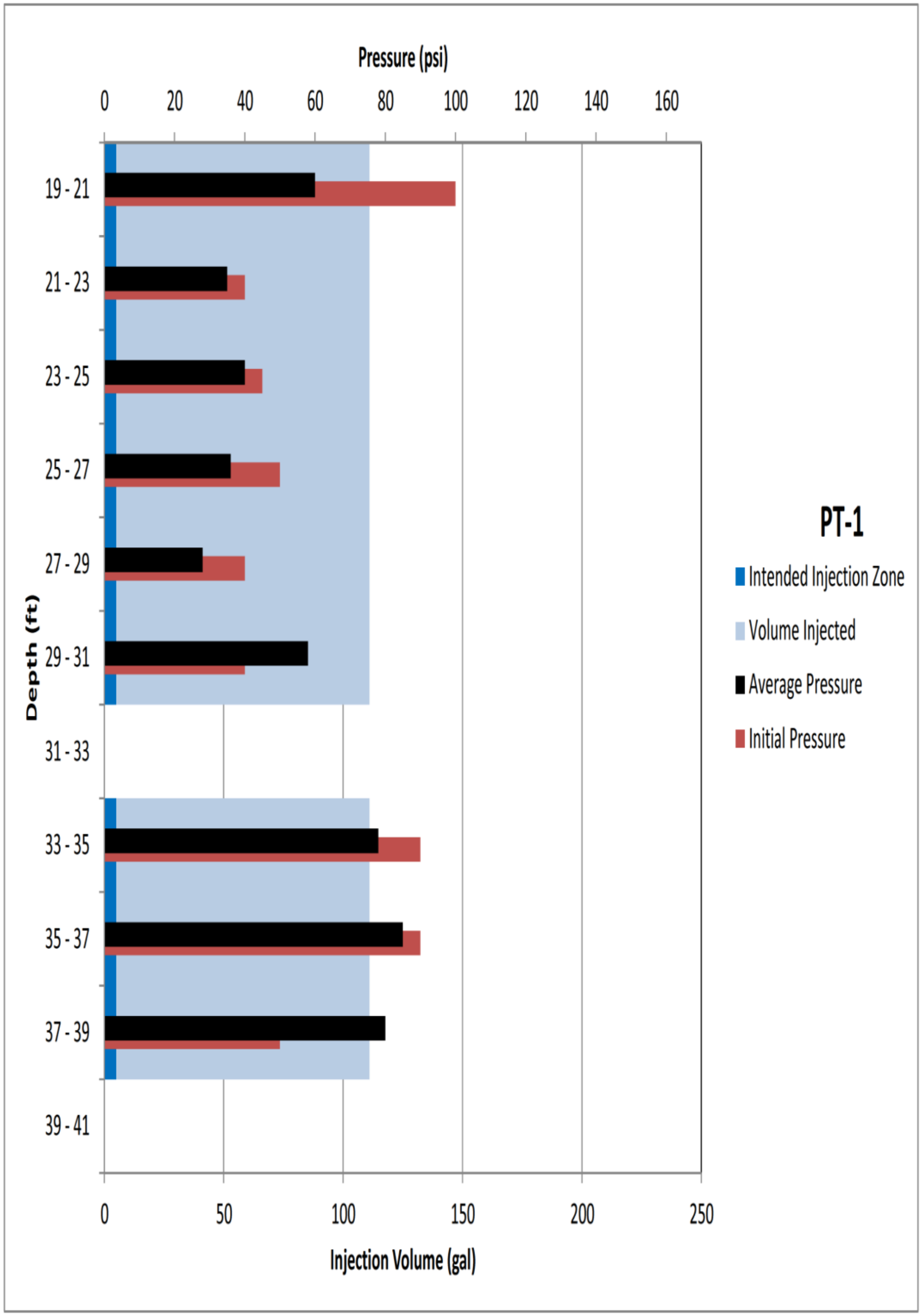
**Cabot Carbon/Koppers Superfund Site
Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE	
DRAFTED	LD		**PT-1a**
PROJECT #	117-2201329		
DATE	4-21-14		

Note:
Borehole log on left is for adjacent TIP 400N/380E.





TITLE:

REAGENT VOLUME INJECTED INTO PT-1 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

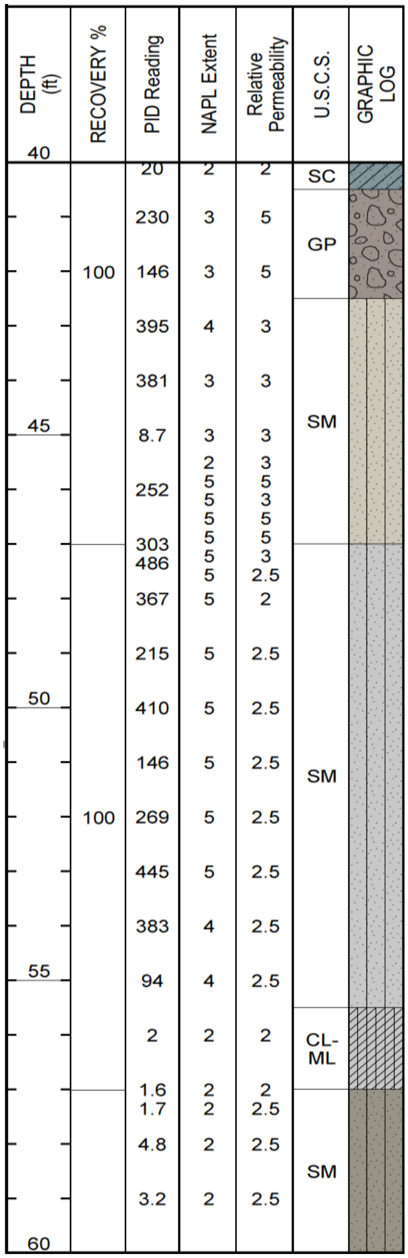
LOCATION:

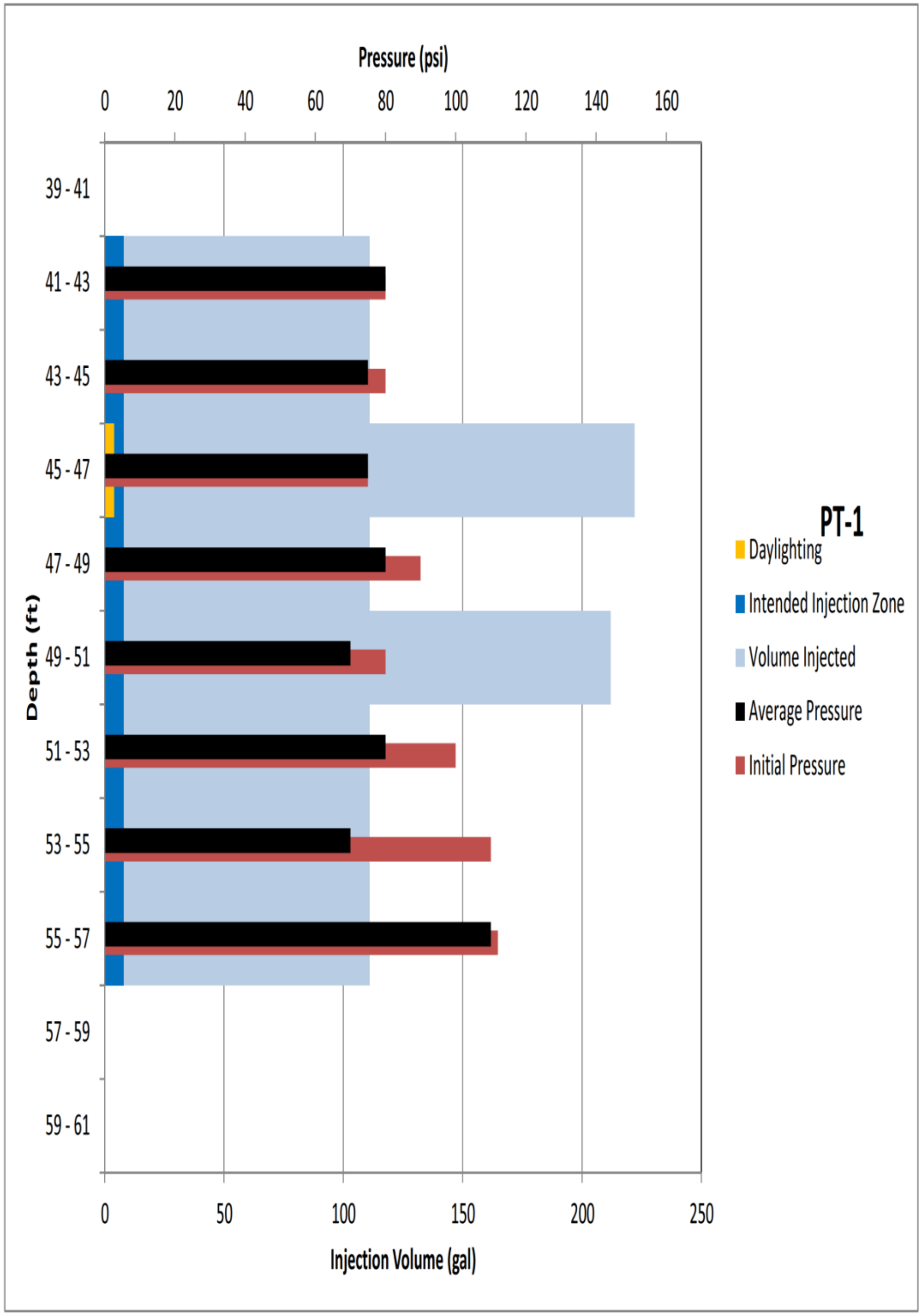
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-1b**
PROJECT #	117-2201329	
DATE	4-21-14	

Note:
Borehole log on left is for adjacent TIP 400N/380E.





TITLE:

REAGENT VOLUME INJECTED INTO PT-1
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:

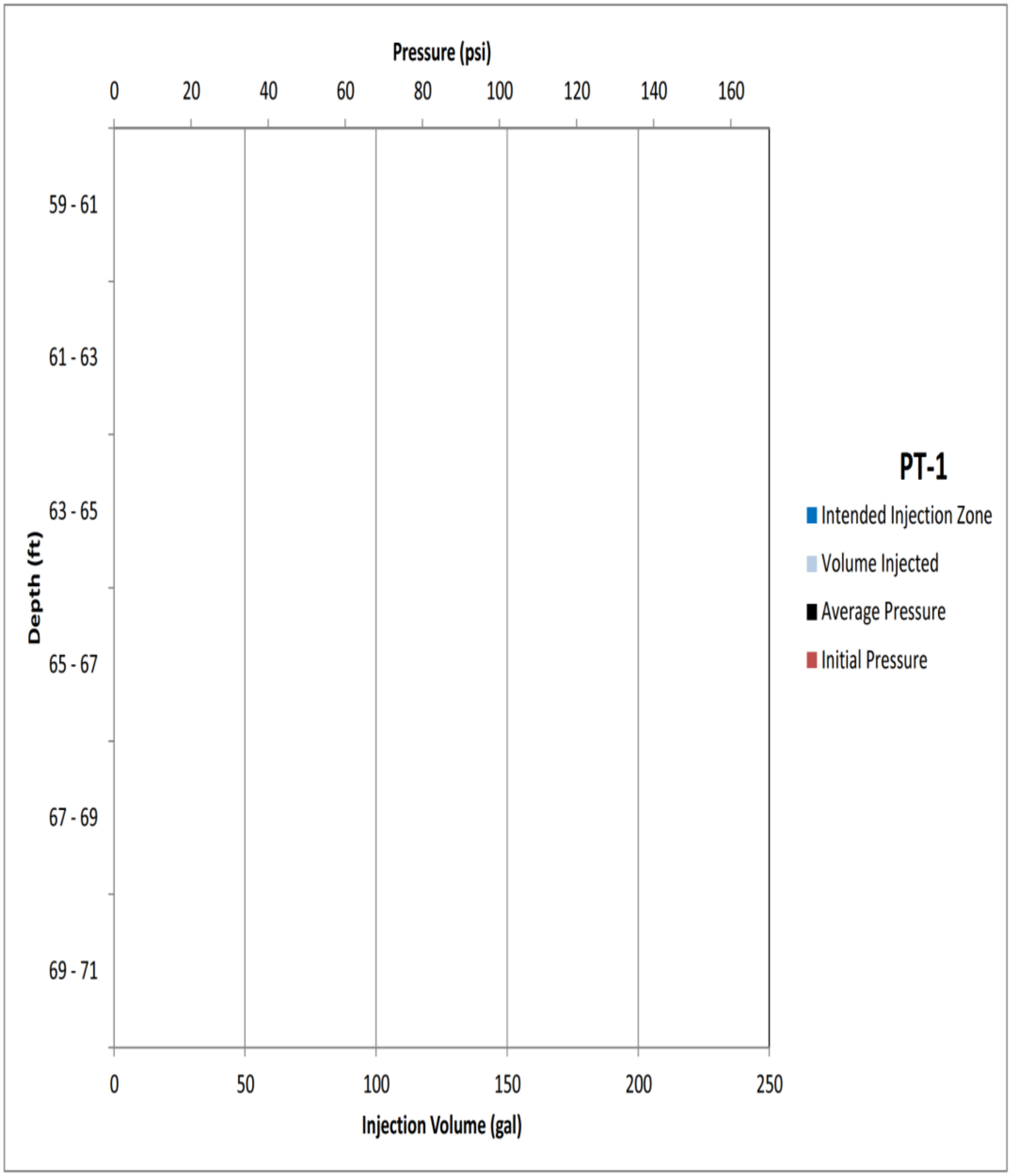
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-1c**
PROJECT #	117-2201329	
DATE	4-21-14	

Note:
Borehole log on left is for adjacent TIP 400N/380E.

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
60		3.2	2	2.5		
		2	2	2.5		
	100	1.8	2	2.5	SM	
		0.6	1	2.5		
		0.2	1	2		
65		0.3	1	2	SC-SM	
		0.0	1	2		
		0.0	1	1.5	CL-ML	
		0.0	1	1.5		
	100	0.0	1	1.5	CL	
		0.0	1	1.5		



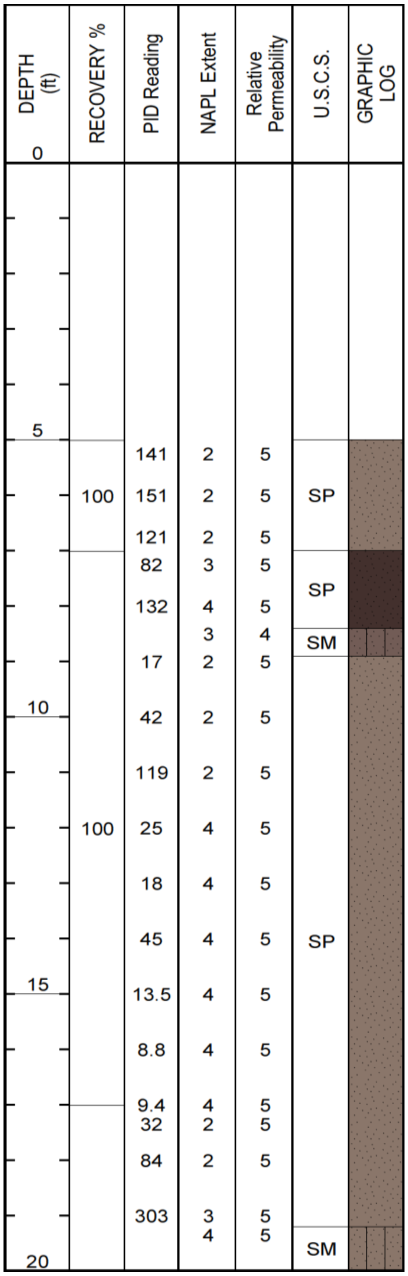
Note:
Borehole log on left is for adjacent TIP 400N/380E.

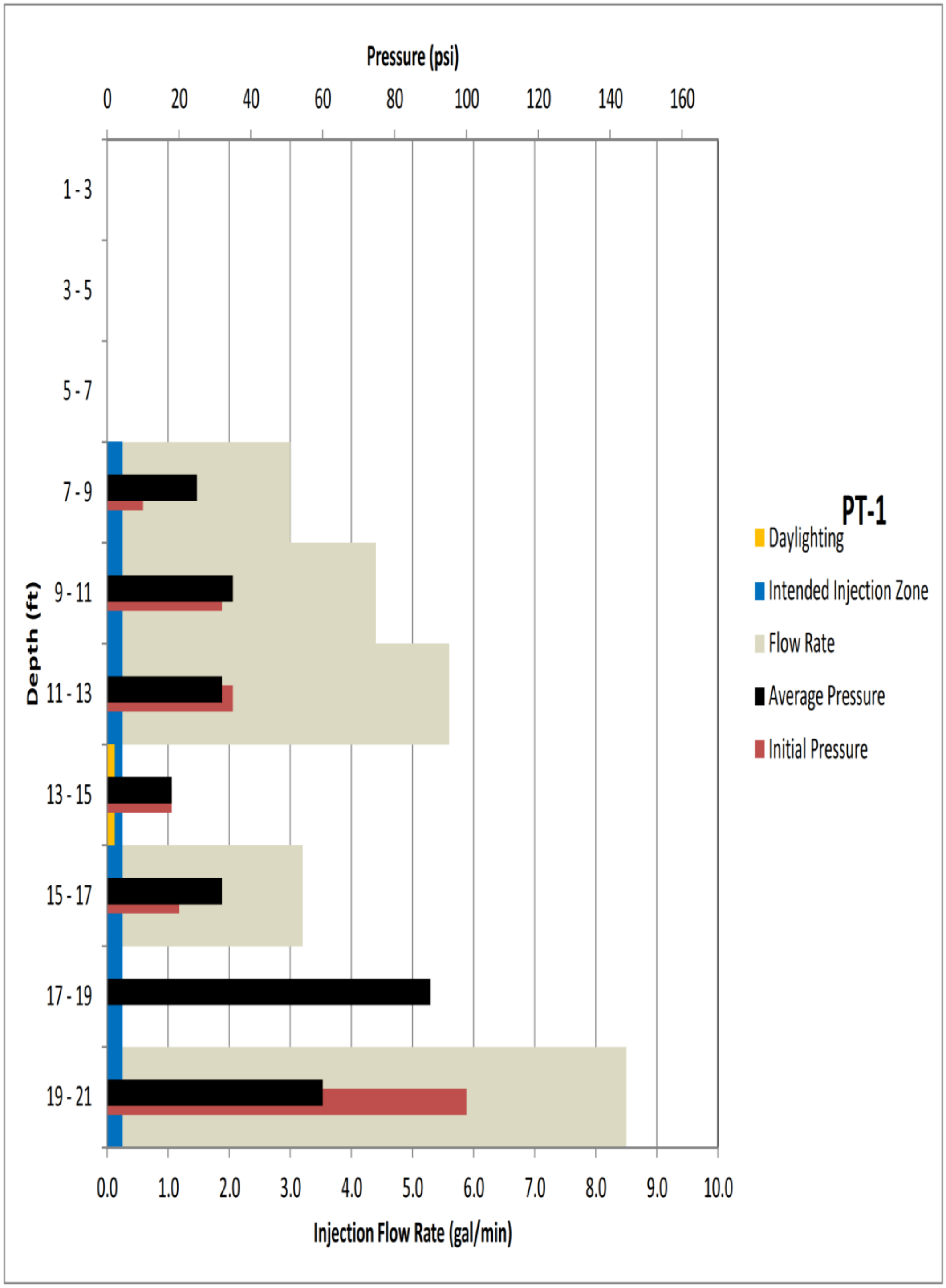
TITLE: **REAGENT VOLUME INJECTED INTO PT-1 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-1d**
PROJECT #	117-2201329	
DATE	4-21-14	





TITLE:

REAGENT FLOW RATE FOR PT-1
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:

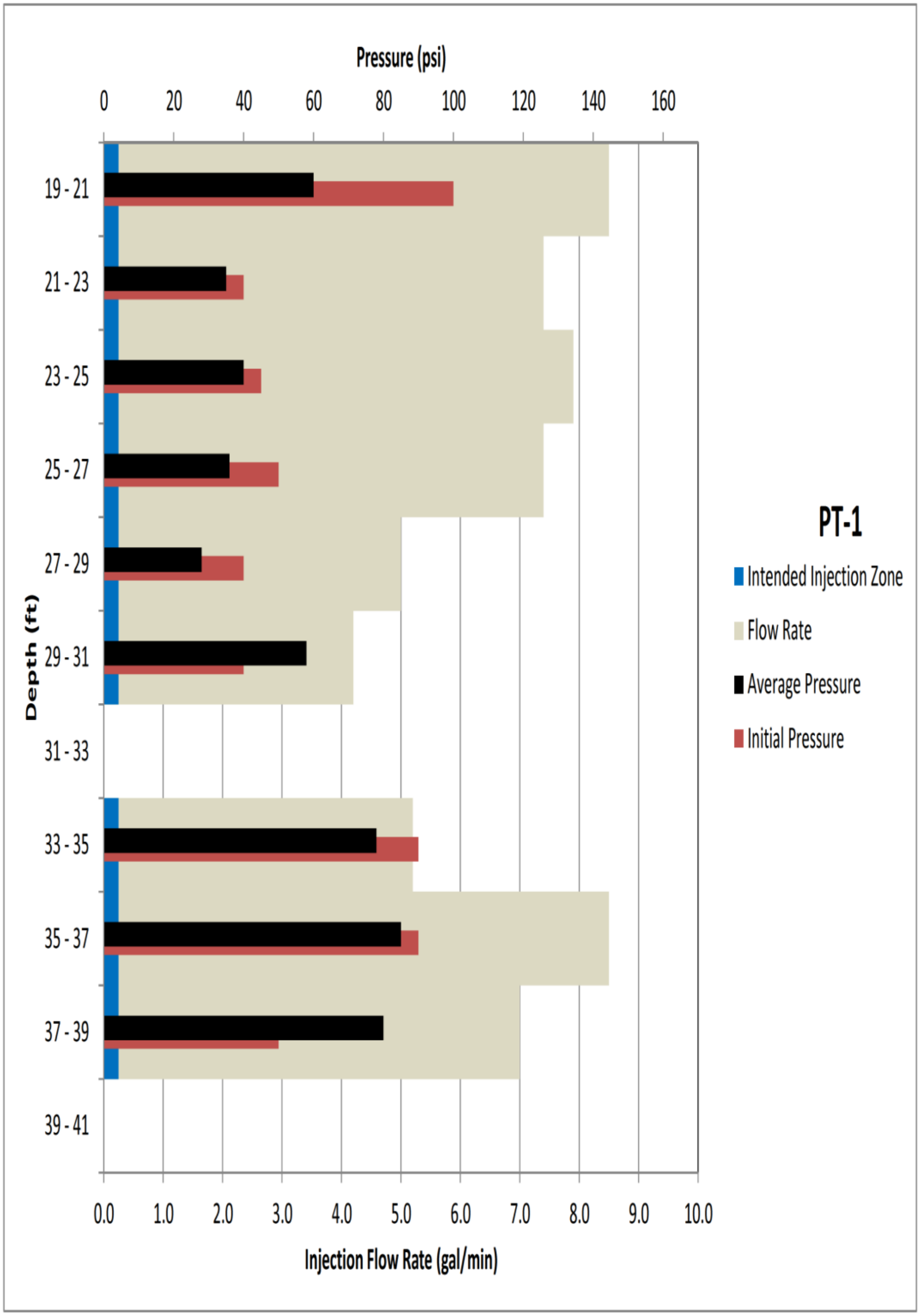
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	
PROJECT #	117-2201329	**PT-1e**
DATE	4-28-14	

Note:
Borehole log on left is for adjacent TIP 400N/380E.

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
20		161	3	4	SM	
		8.2	3	4		
			2	2	CH	
	100	6.3	2	1		
		3.2	2	1		
		3.3	2	1		
25		298	4	4	SP	
		117	3	1.5	CL-ML	
		28 56	2 4	1.5 2.5	SP	
		176	5 5	5 5	GP	
		3.6	2	2.5	SM	
			3	2.5		
30		4.8	2	2.5		
		19	2	2.5		
	100	30	2	2.5		
		75	4	2.5		
		40	3 2	2.5 2.5		
35		39	4	2.5		
		50	4	2.5		
			5	2.5		
		64 7.2	4 2	2.5 2.5	SM	
		21	2	2.5		
		357	3	2.5	SC	
40						



TITLE: REAGENT FLOW RATE FOR PT-1
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION: Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

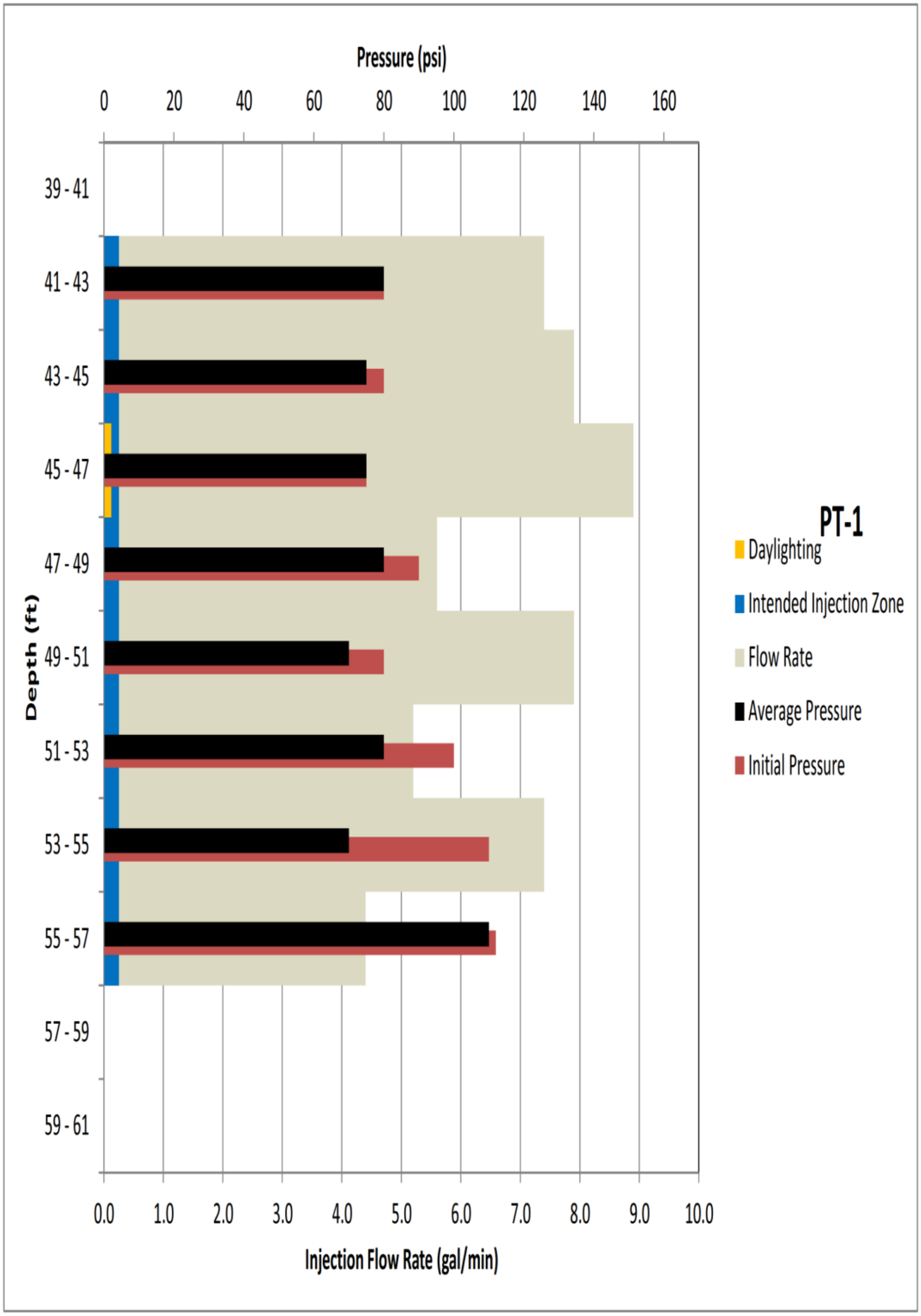
TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	PT-1f
PROJECT #	117-2201329	
DATE	4-28-14	

Note:
Borehole log on left is for adjacent TIP 400N/380E.

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.
40		20	2	2	SC
		230	3	5	GP
	100	146	3	5	
		395	4	3	SM
		381	3	3	
45		8.7	3	3	
			2	3	
		252	5	5	
			5	3	
			5	5	
		303	5	5	
		486	5	3	SM
			5	2.5	
		367	5	2	
		215	5	2.5	
50		410	5	2.5	
		146	5	2.5	
	100	269	5	2.5	
		445	5	2.5	
		383	4	2.5	
55		94	4	2.5	
		2	2	2	CL-ML
		1.6	2	2	SM
		1.7	2	2.5	
		4.8	2	2.5	
		3.2	2	2.5	
60					

GRAPHIC LOG



TITLE:

REAGENT FLOW RATE FOR PT-1
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

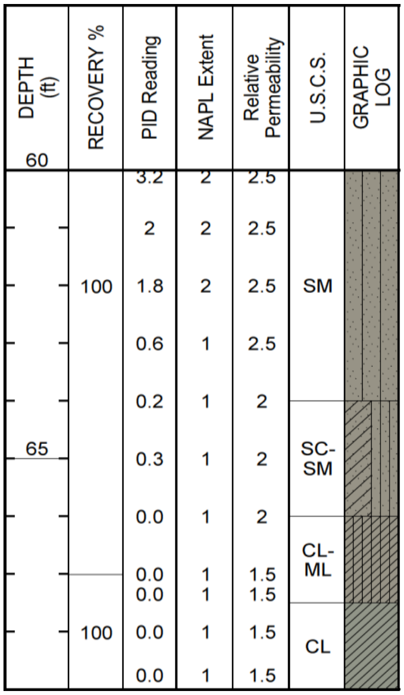
LOCATION:

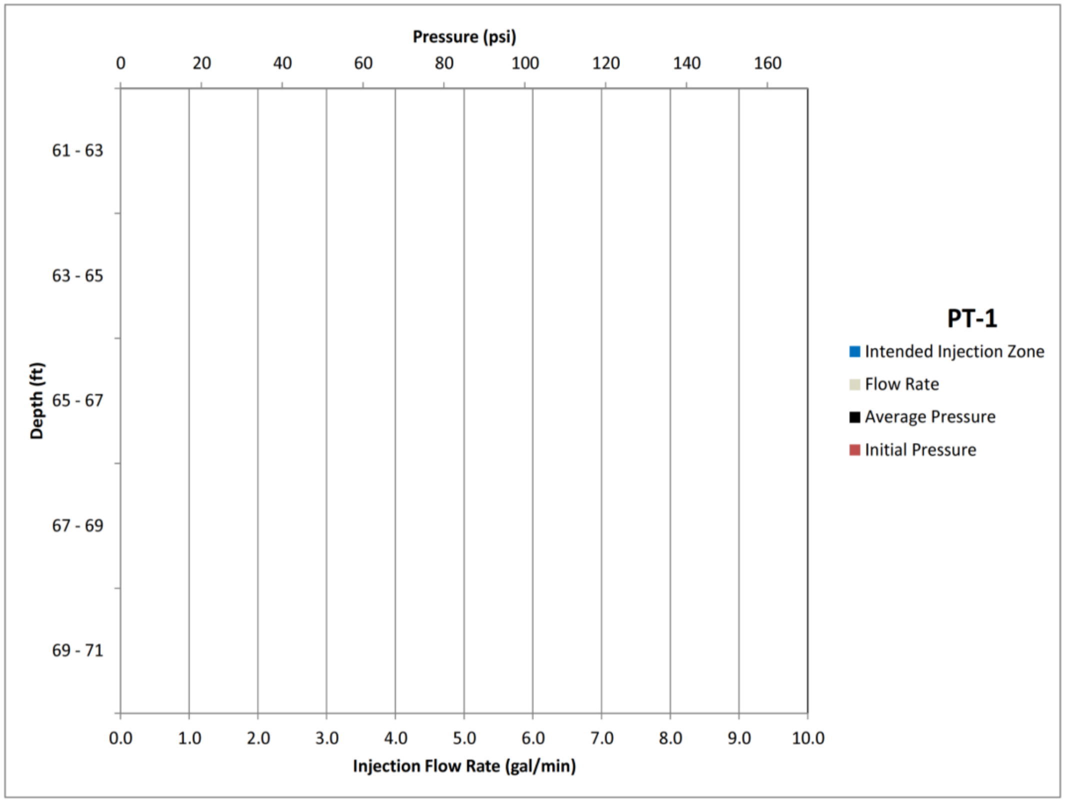
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-1g**
PROJECT #	117-2201329	
DATE	4-28-14	

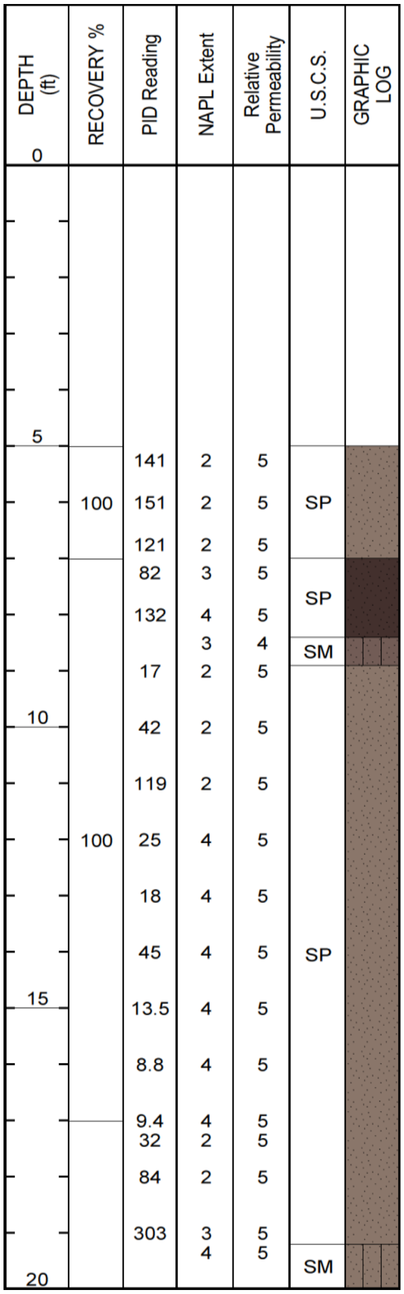
Note:
Borehole log on left is for adjacent TIP 400N/380E.

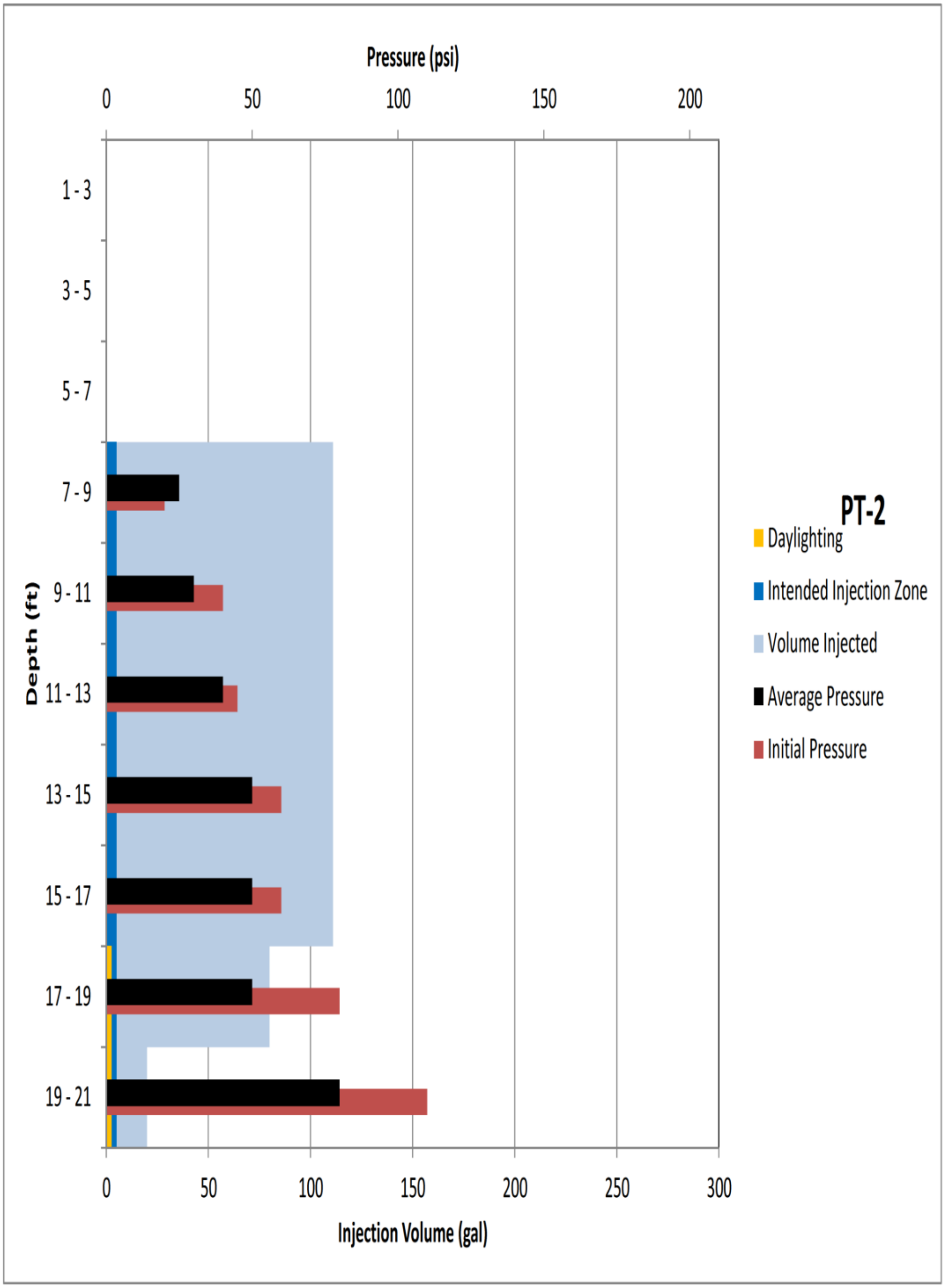




Note:
Borehole log on left is for adjacent TIP 400N/380E.

TITLE:	**REAGENT FLOW RATE FOR PT-1 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**		
LOCATION:	**Cabot Carbon/Koppers Superfund Site Gainesville, Florida**		
TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	LD	**PT-1h**
	PROJECT #	117-2201329	
	DATE	4-28-14	





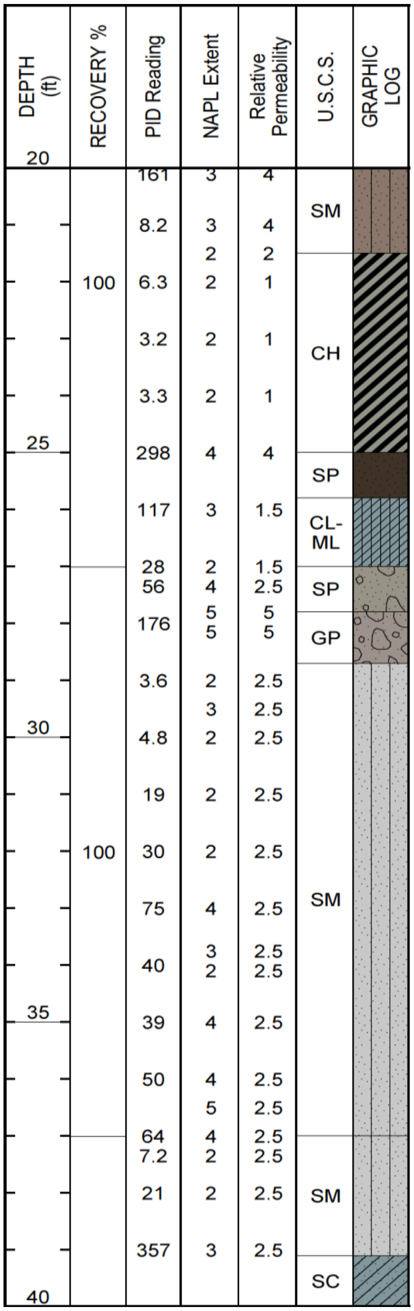
Note:
Borehole log on left is for adjacent TIP 400N/380E.

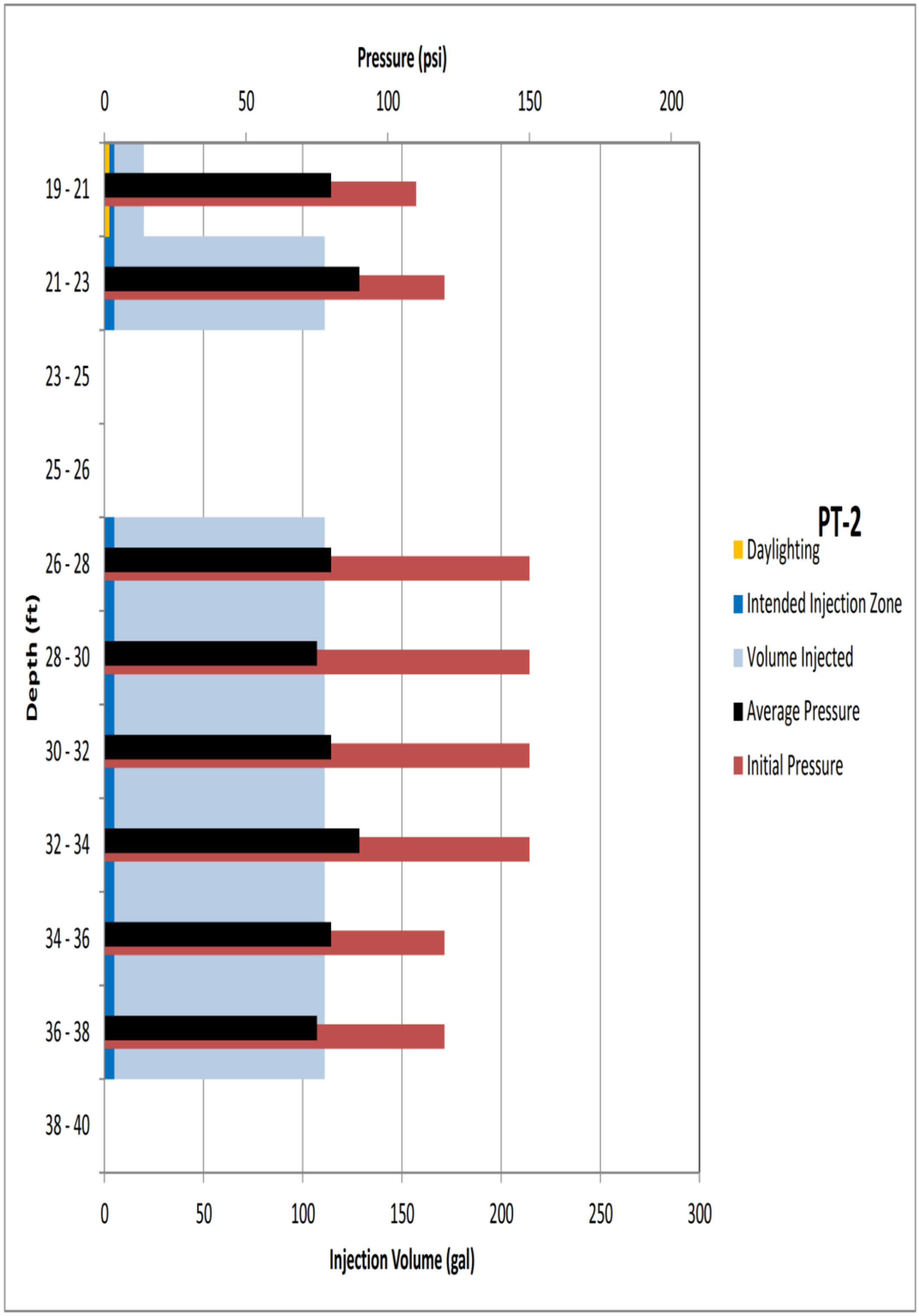
TITLE:
**REAGENT VOLUME INJECTED INTO PT-2
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

LOCATION:
**Cabot Carbon/Koppers Superfund Site
Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-2a**
PROJECT #	117-2201329	
DATE	4-21-14	





TITLE:

REAGENT VOLUME INJECTED INTO PT-2
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

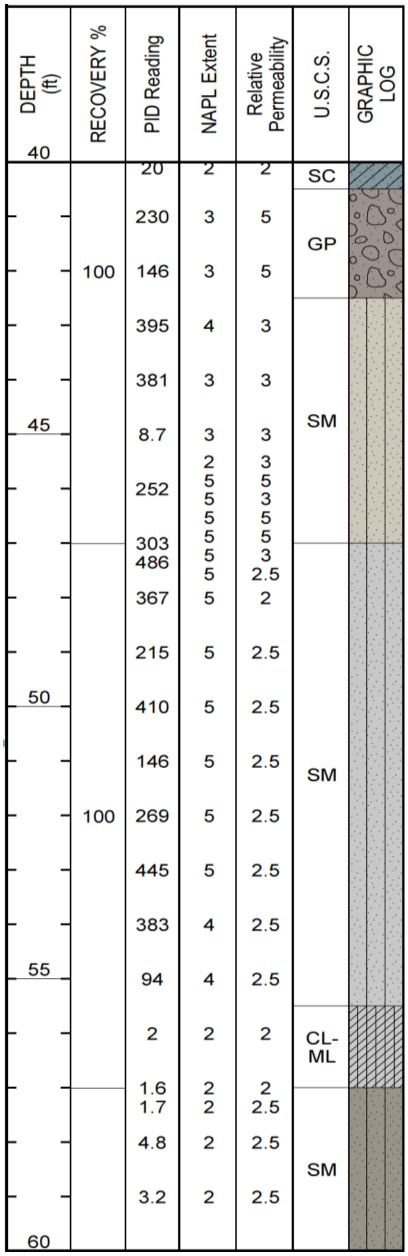
LOCATION:

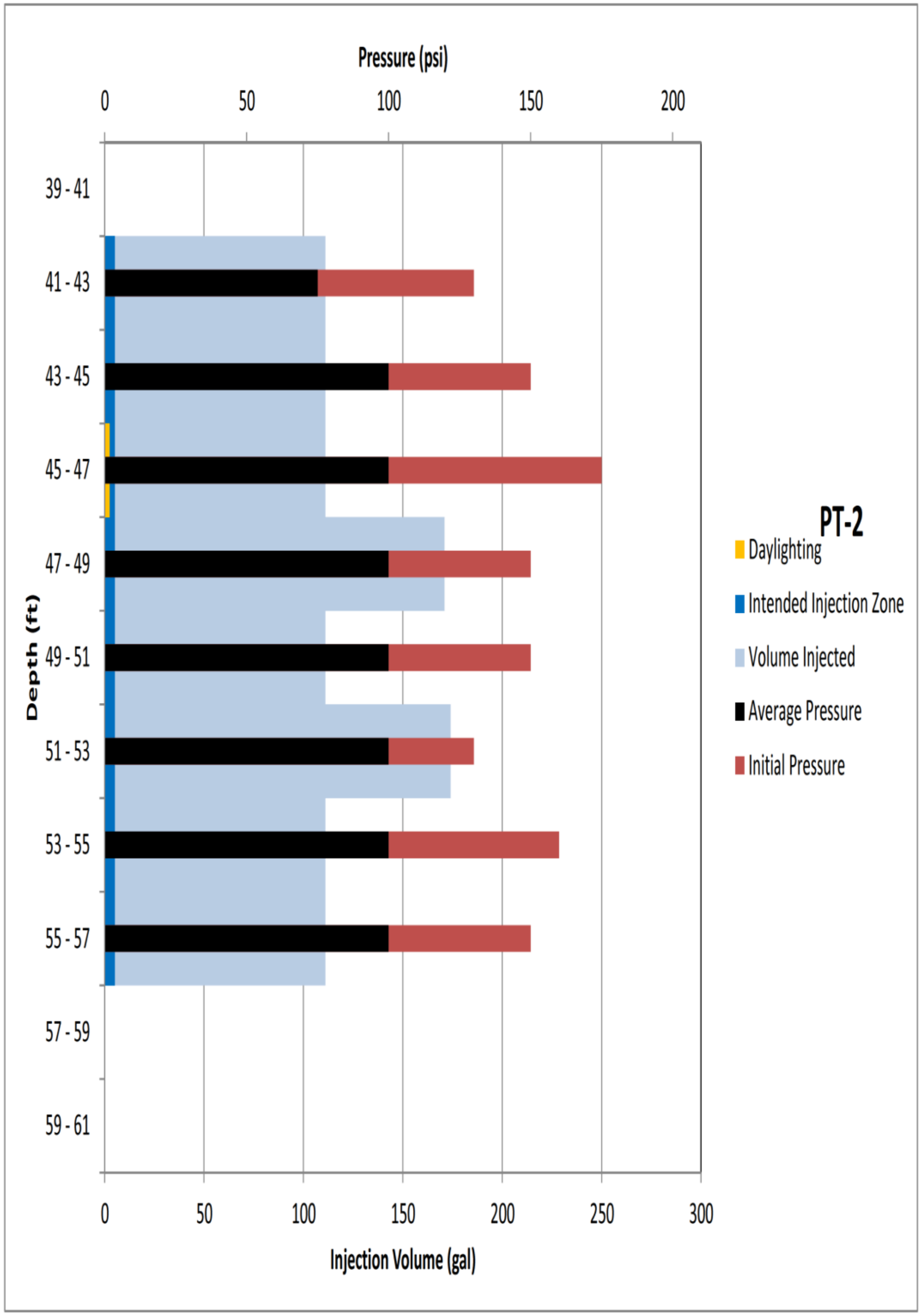
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-2b**
PROJECT #	117-2201329	
DATE	4-21-14	

Note:
Borehole log on left is for adjacent TIP 400N/380E.





TITLE:

REAGENT VOLUME INJECTED INTO PT-2
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:

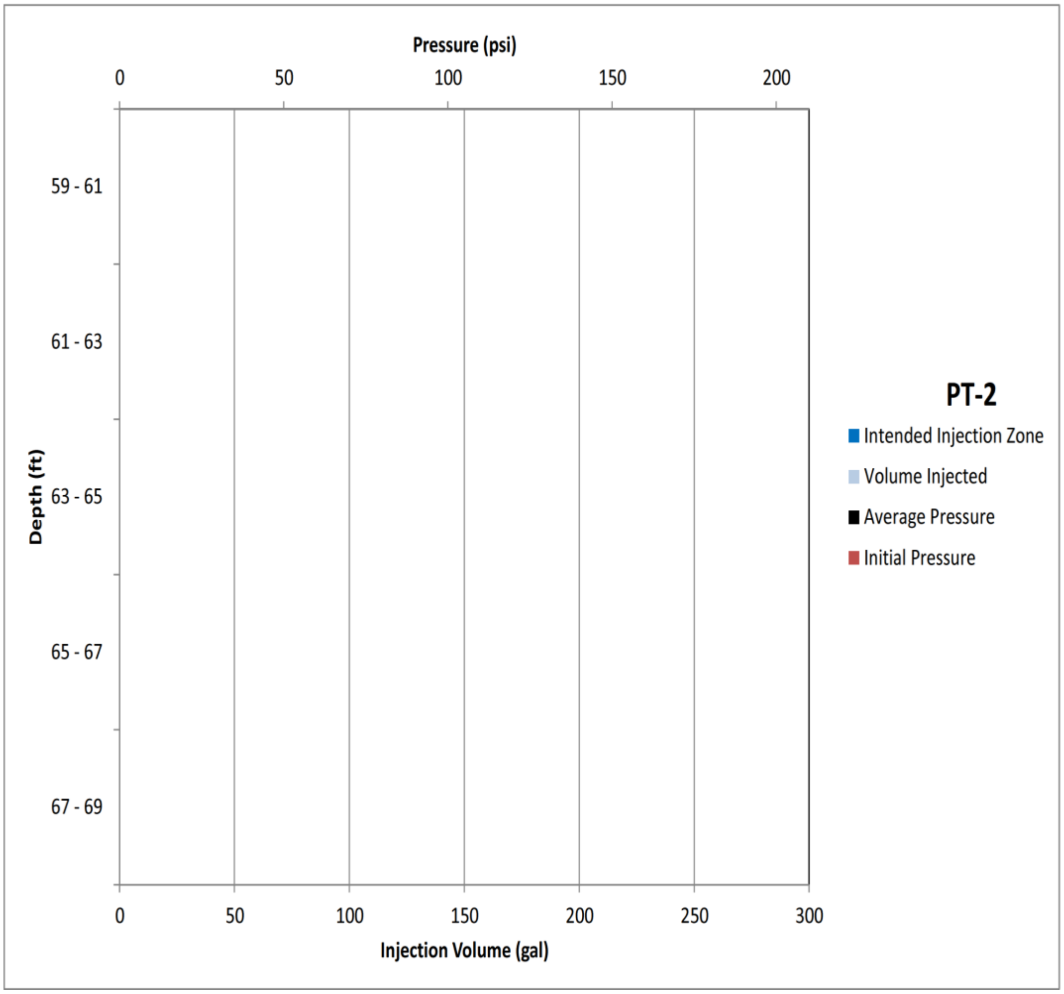
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-2c**
PROJECT #	117-2201329	
DATE	4-21-14	

Note:
Borehole log on left is for adjacent TIP 400N/380E.

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
60		3.2	2	2.5		
		2	2	2.5		
	100	1.8	2	2.5	SM	
		0.6	1	2.5		
		0.2	1	2		
65		0.3	1	2	SC-SM	
		0.0	1	2		
		0.0	1	1.5	CL-ML	
		0.0	1	1.5		
	100	0.0	1	1.5	CL	
		0.0	1	1.5		



Note:
Borehole log on left is for adjacent TIP 400N/380E.

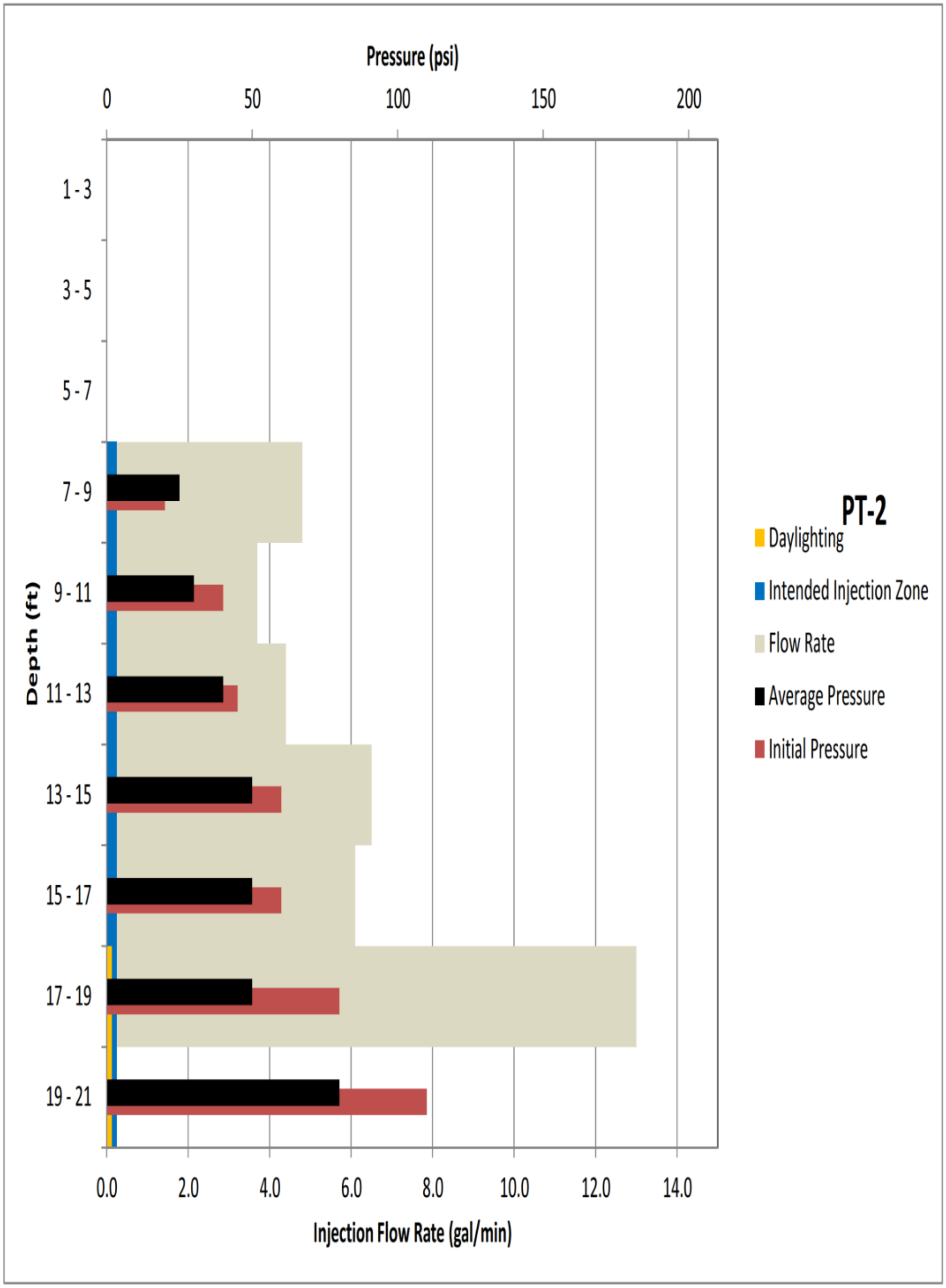
TITLE:
REAGENT VOLUME INJECTED INTO PT-2 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-2d**
PROJECT #	117-2201329	
DATE	4-21-14	

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
0						
5						
		141	2	5		
	100	151	2	5	SP	
		121	2	5		
		82	3	5		
		132	4	5	SP	
			3	4	SM	
		17	2	5		
10		42	2	5		
		119	2	5		
	100	25	4	5		
		18	4	5		
		45	4	5	SP	
15		13.5	4	5		
		8.8	4	5		
		9.4	4	5		
		32	2	5		
		84	2	5		
		303	3	5		
			4	5	SM	
20						



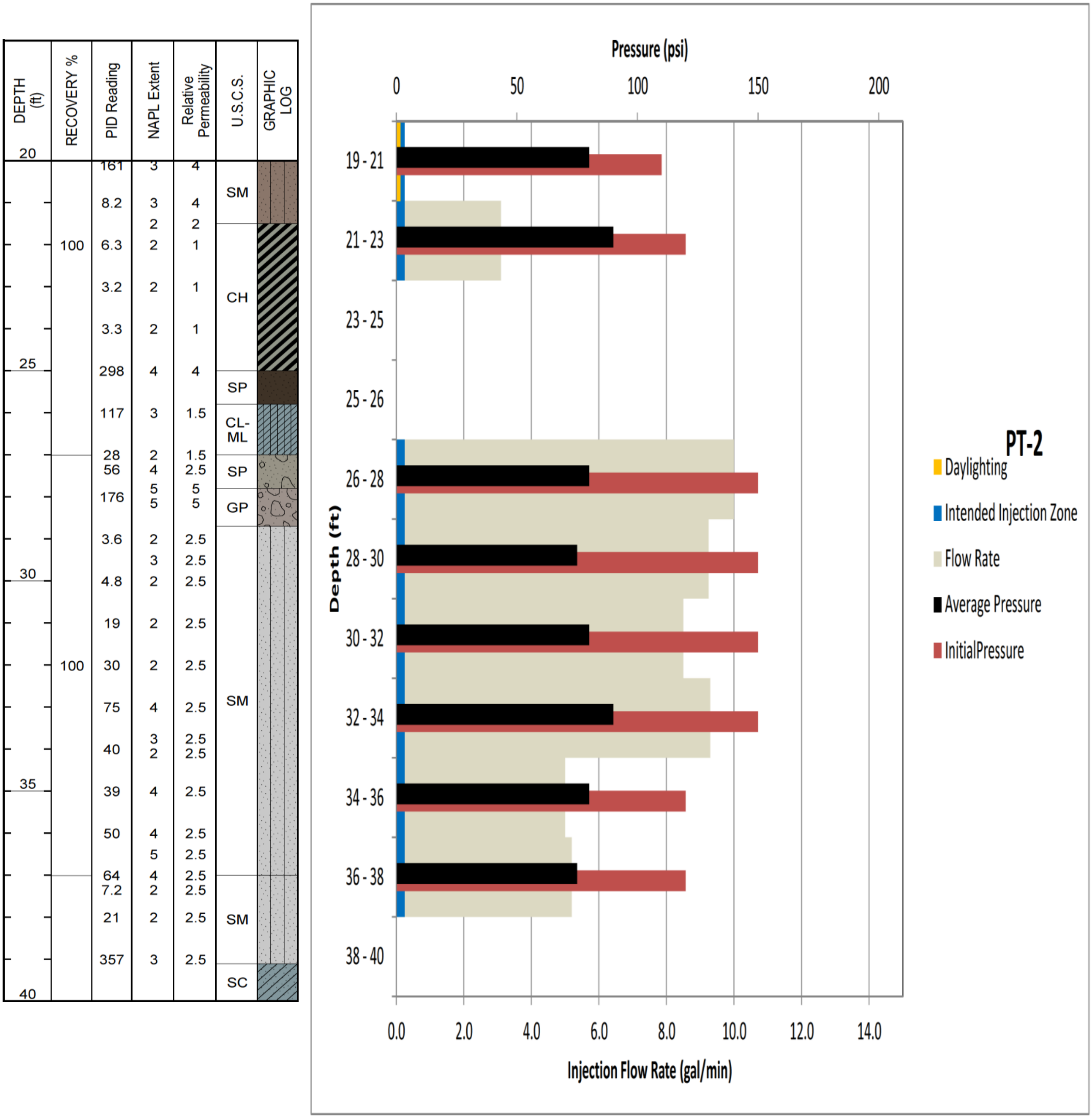
TITLE:
REAGENT FLOW RATE FOR PT-2
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

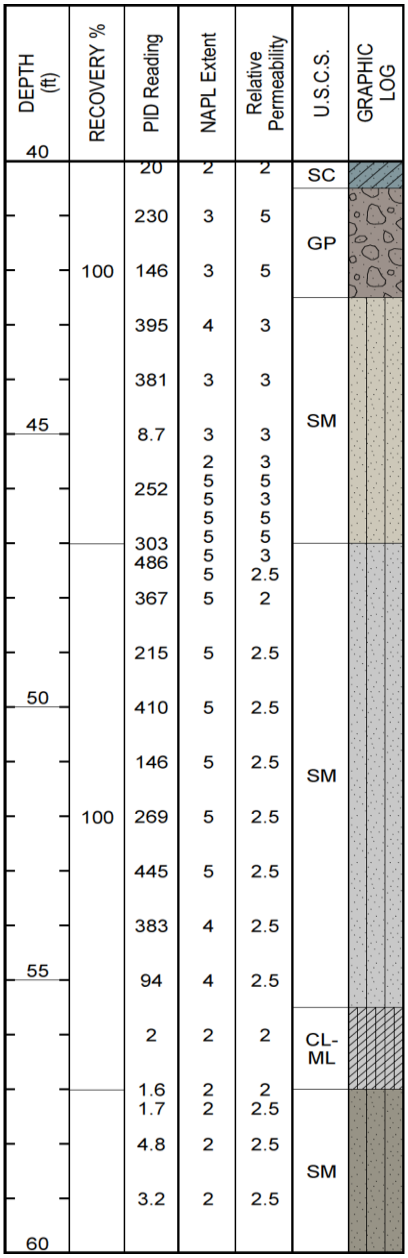
APPROVED	JE	FIGURE
DRAFTED	LD	
PROJECT #	117-2201329	**PT-2e**
DATE	4-28-14	

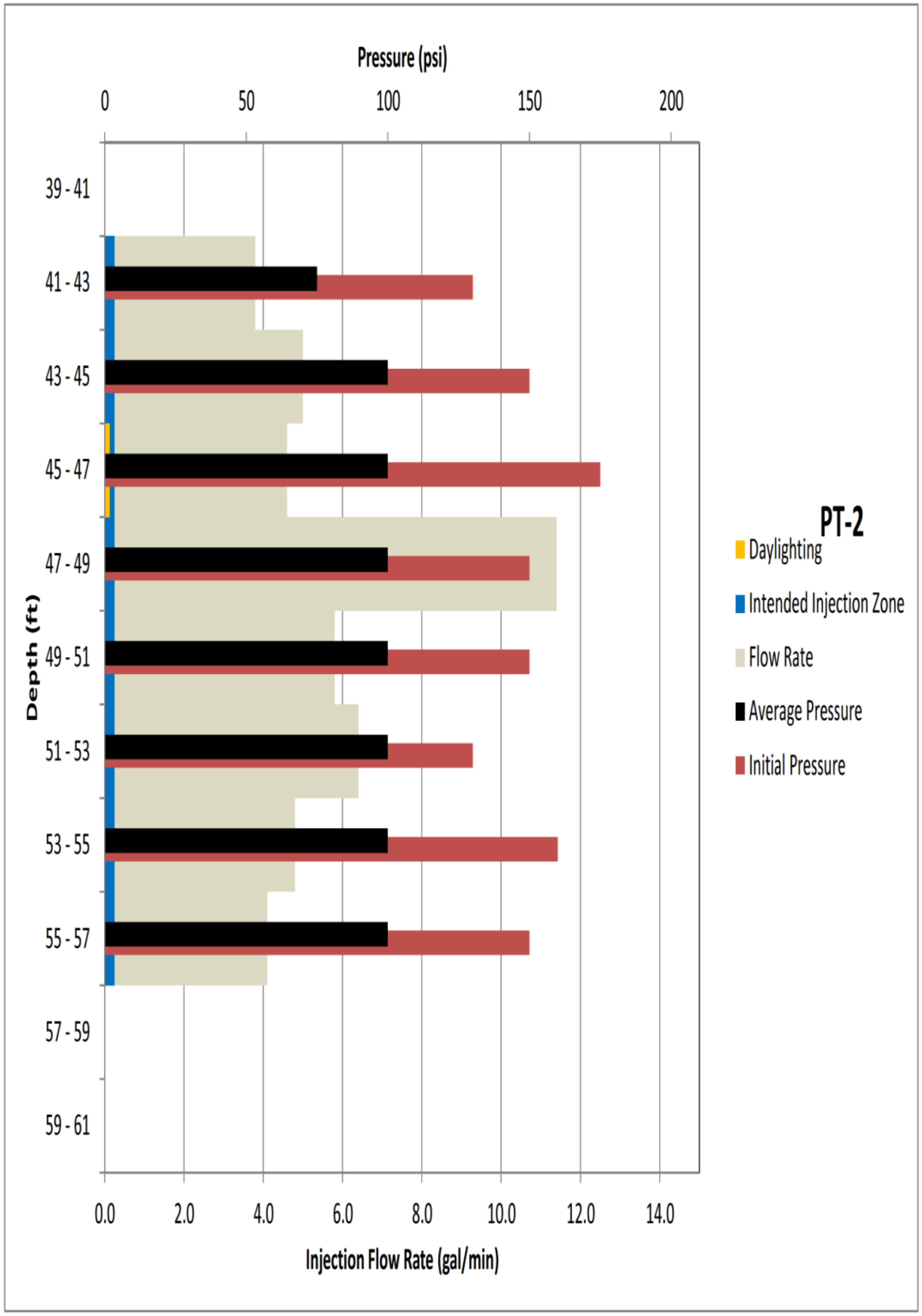
Note:
Borehole log on left is for adjacent TIP 400N/380E.



Note:
Borehole log on left is for adjacent TIP 400N/380E.

TITLE:	REAGENT FLOW RATE FOR PT-2 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES		
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida		
TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	LD	PT-2f
	PROJECT #	117-2201329	
	DATE	4-28-14	





TITLE:

REAGENT FLOW RATE FOR PT-2
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:

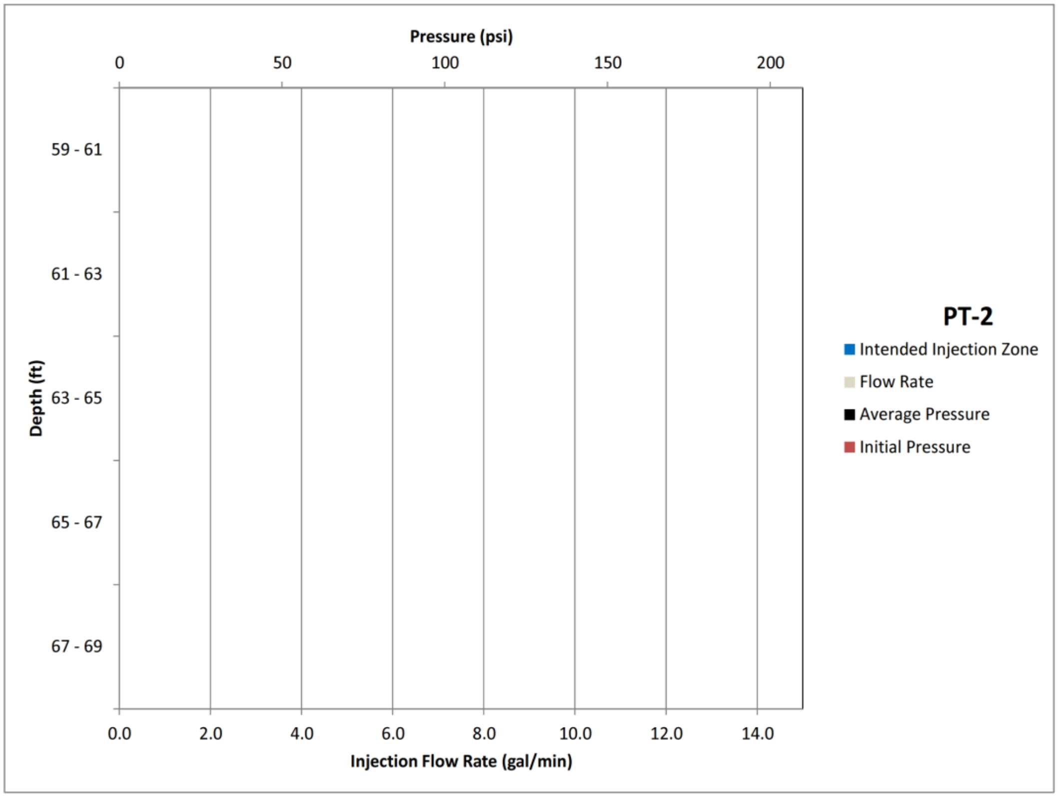
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-2g**
PROJECT #	117-2201329	
DATE	4-28-14	

Note:
Borehole log on left is for adjacent TIP 400N/380E.

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
60		3.2	2	2.5	SM	
		2	2	2.5		
	100	1.8	2	2.5		
		0.6	1	2.5		
		0.2	1	2	SC-SM	
65		0.3	1	2		
		0.0	1	2		
		0.0	1	1.5	CL-ML	
		0.0	1	1.5		
	100	0.0	1	1.5	CL	
		0.0	1	1.5		



TITLE:

REAGENT FLOW RATE FOR PT-2
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

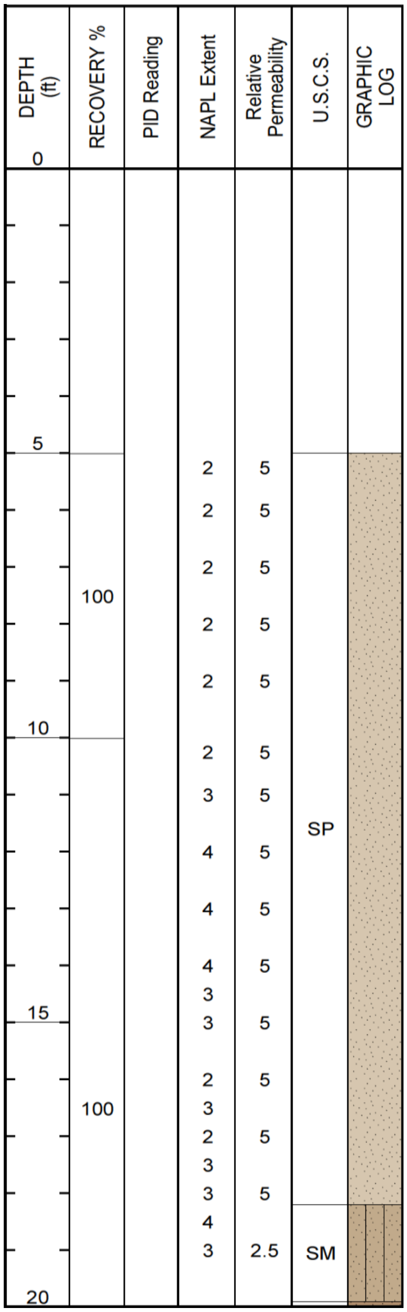
LOCATION:

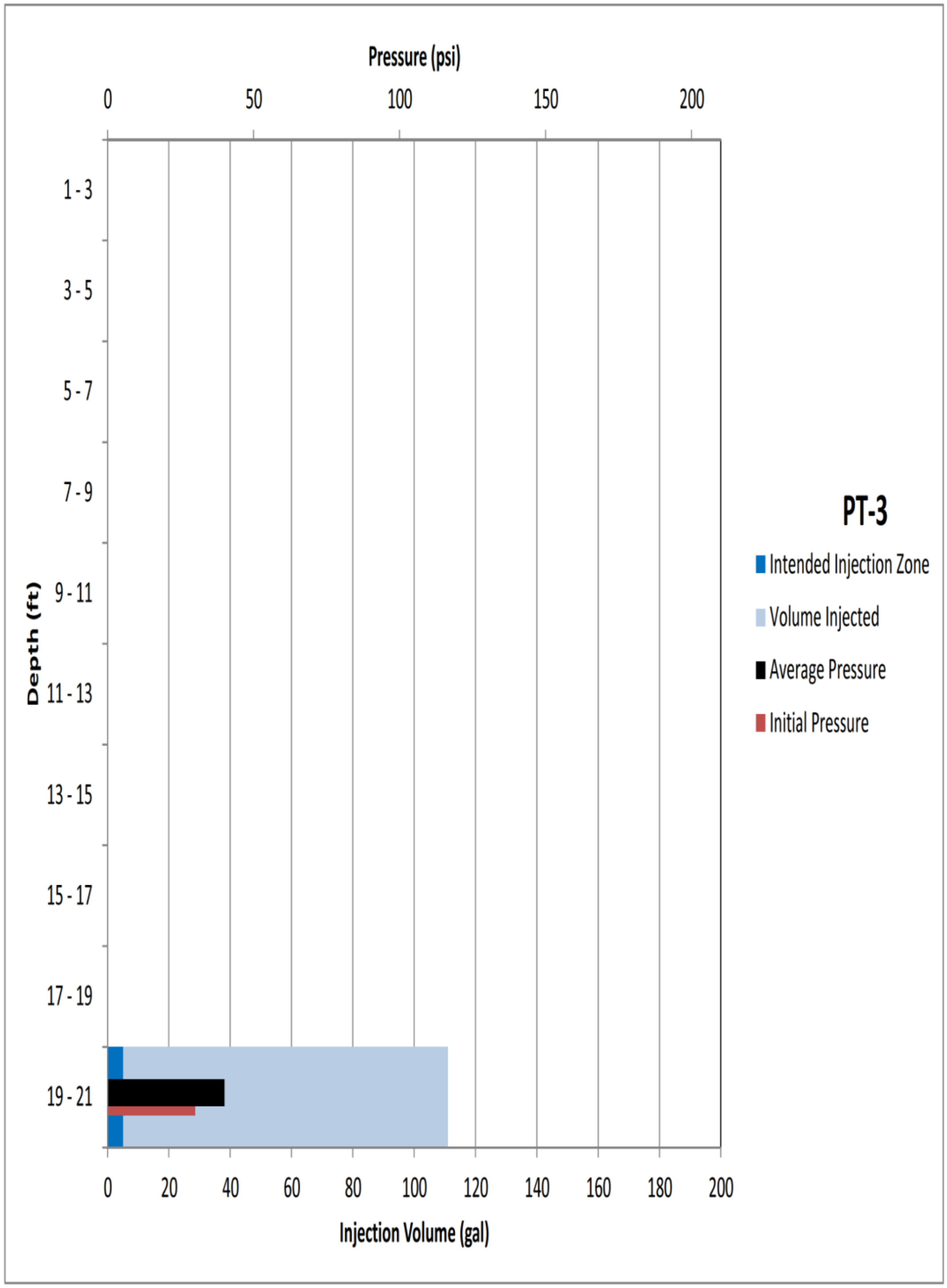
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-2h**
PROJECT #	117-2201329	
DATE	4-28-14	

Note:
Borehole log on left is for adjacent TIP 400N/380E.





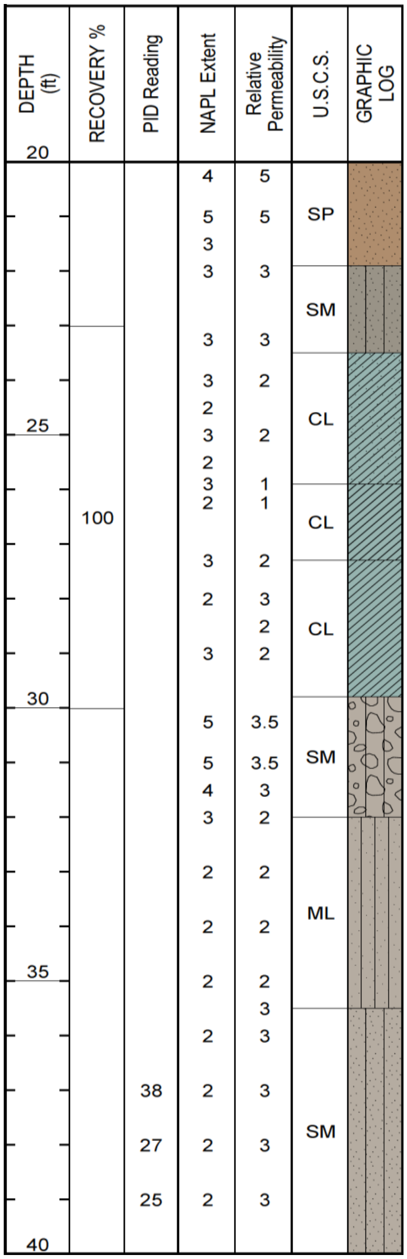
Note:
Borehole log on left is for adjacent well HG-36SE.

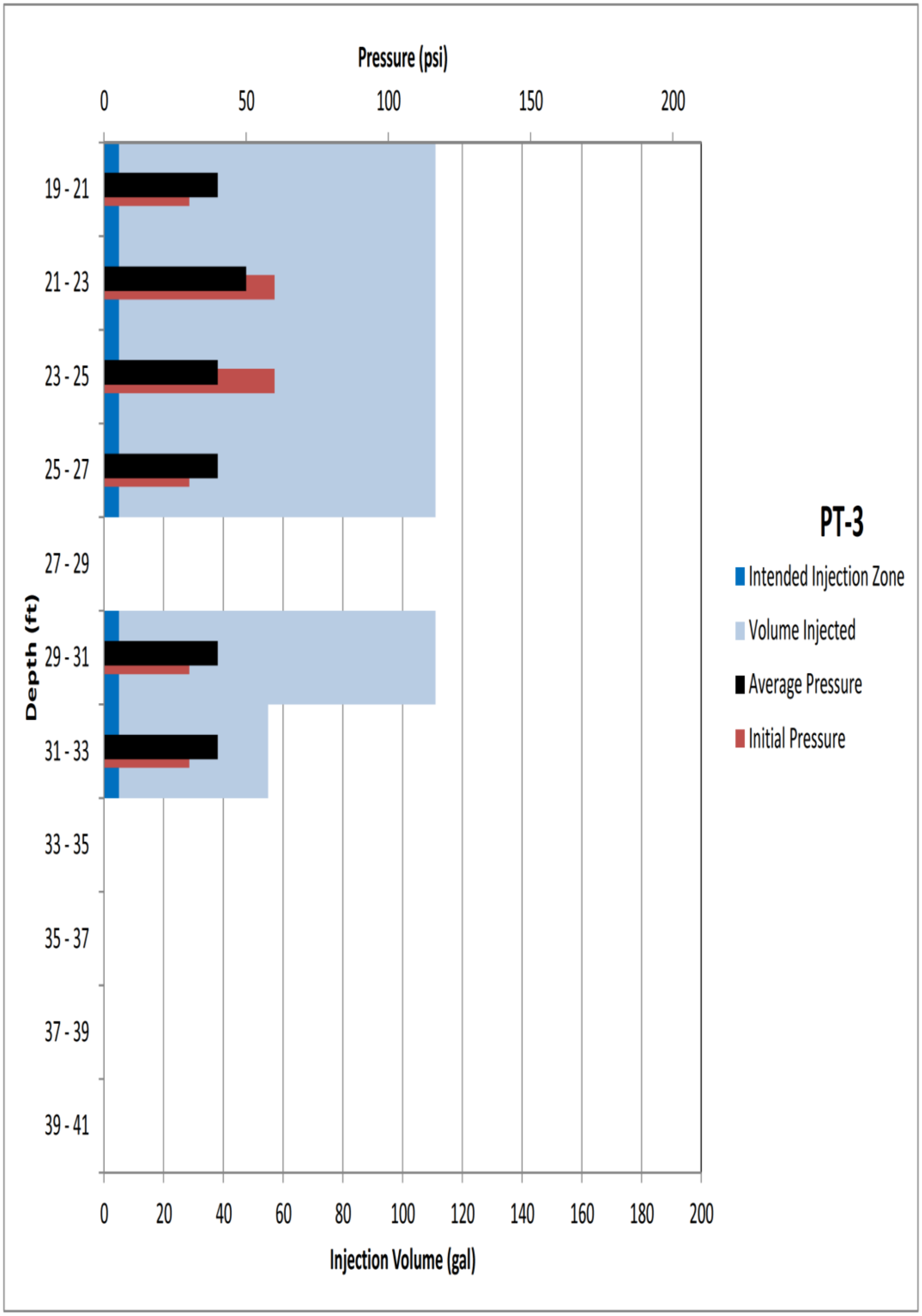
TITLE:
REAGENT VOLUME INJECTED INTO PT-3
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-3a**
PROJECT #	117-2201329	
DATE	4-21-14	



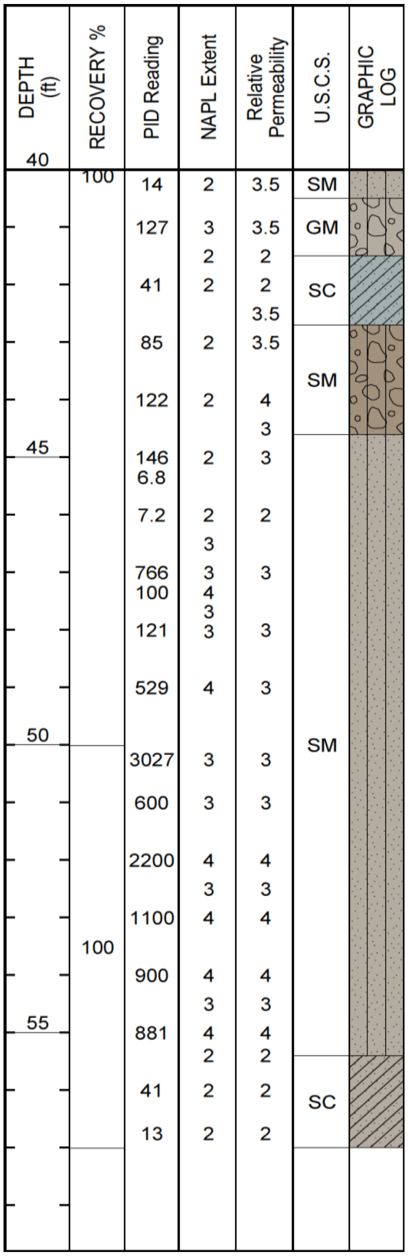


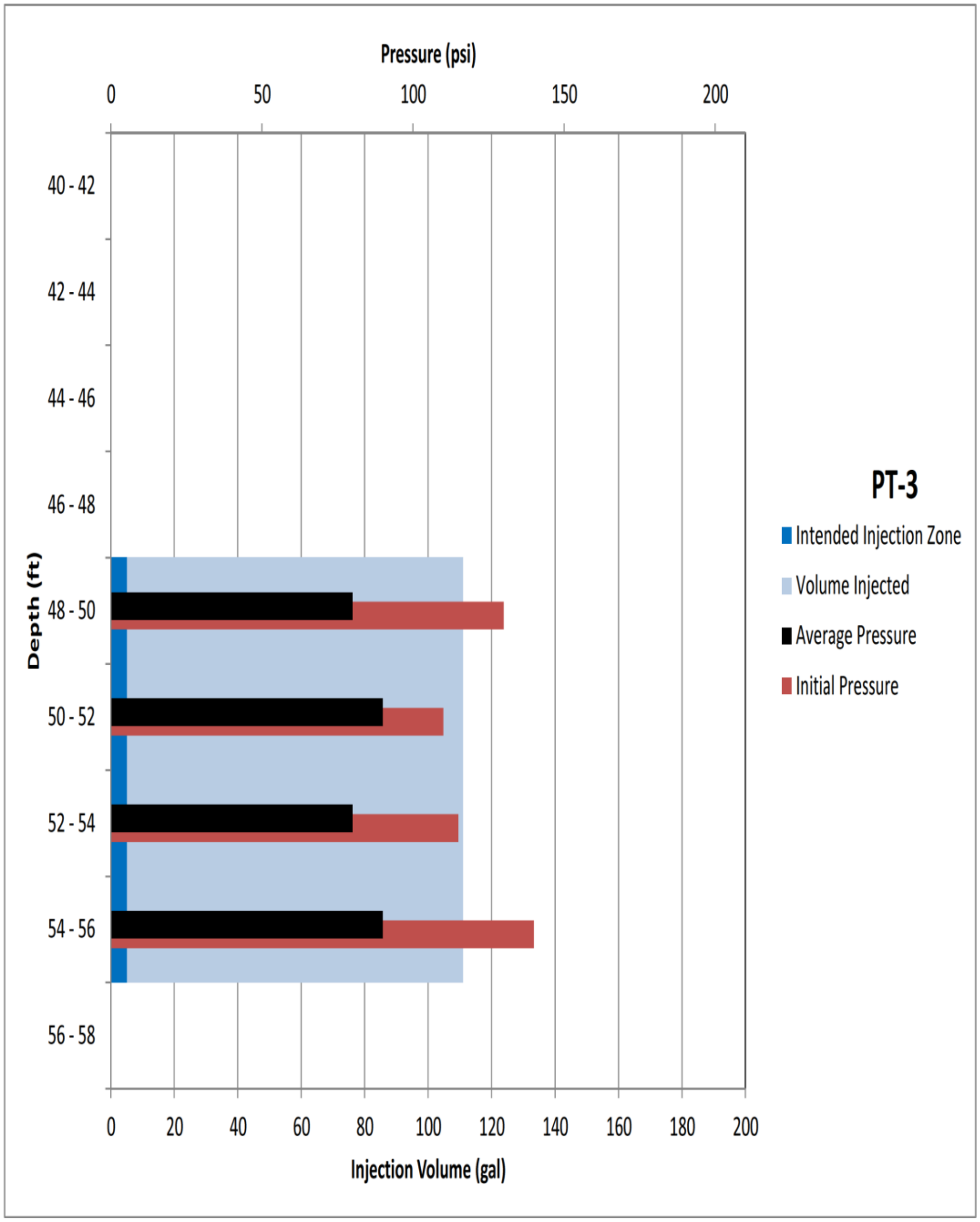
Note:
Borehole log on left is for adjacent well HG-36SE.

TITLE:	**REAGENT VOLUME INJECTED INTO PT-3 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**
LOCATION:	**Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-3b**
PROJECT #	117-2201329	
DATE	4-21-14	





TITLE:

REAGENT VOLUME INJECTED INTO PT-3
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

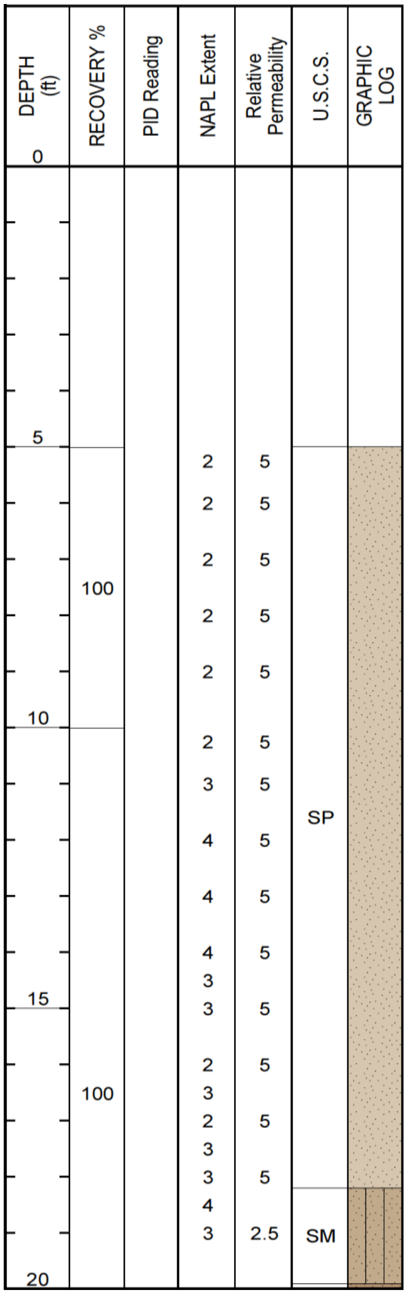
LOCATION:

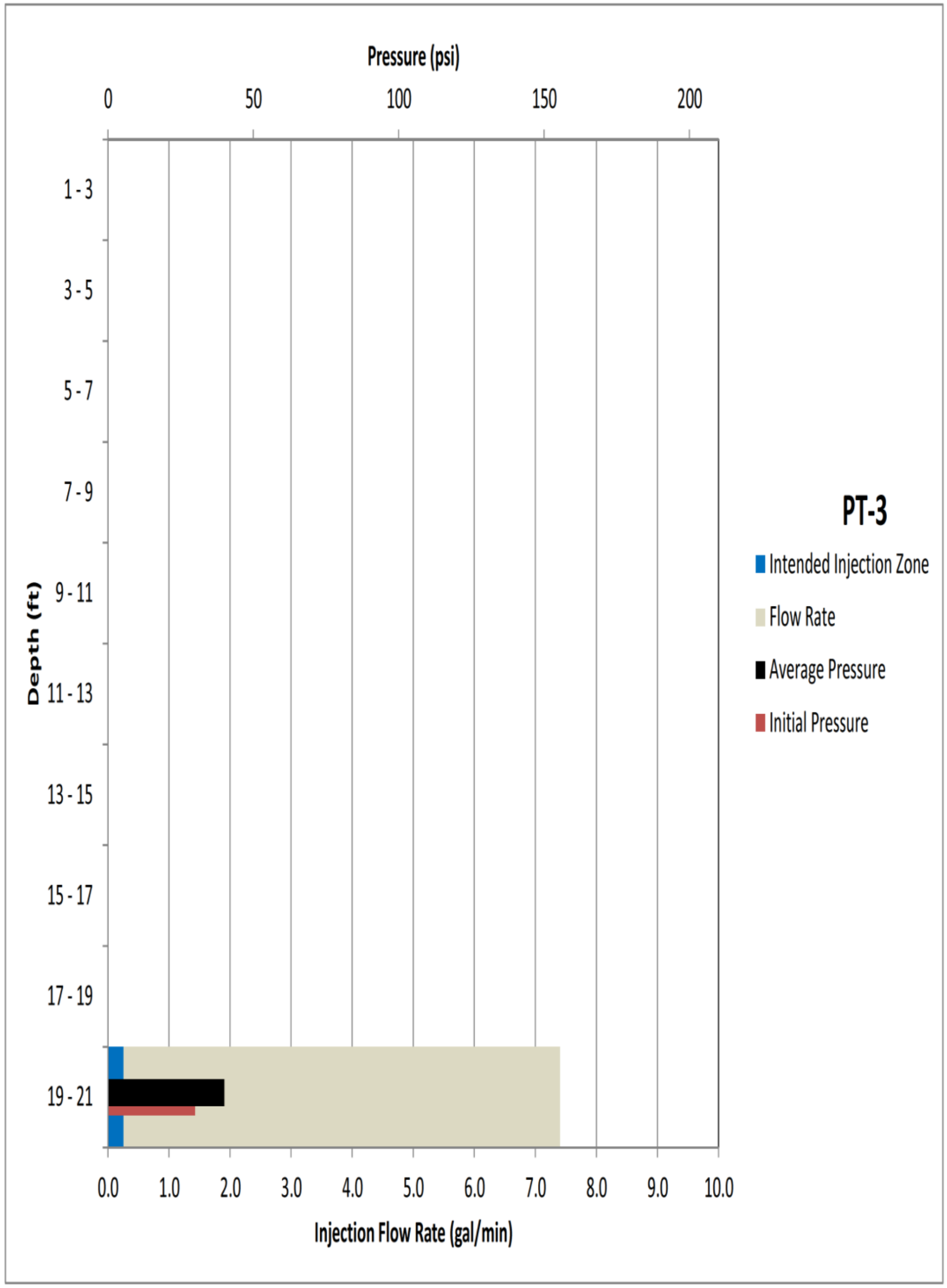
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-3c**
PROJECT #	117-2201329	
DATE	4-21-14	

Note:
Borehole log on left is for adjacent well HG-36SE.

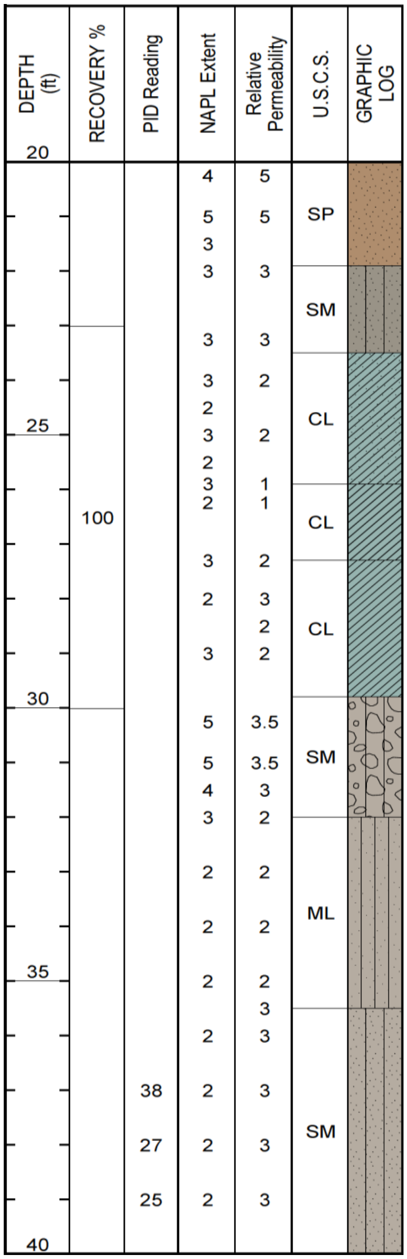


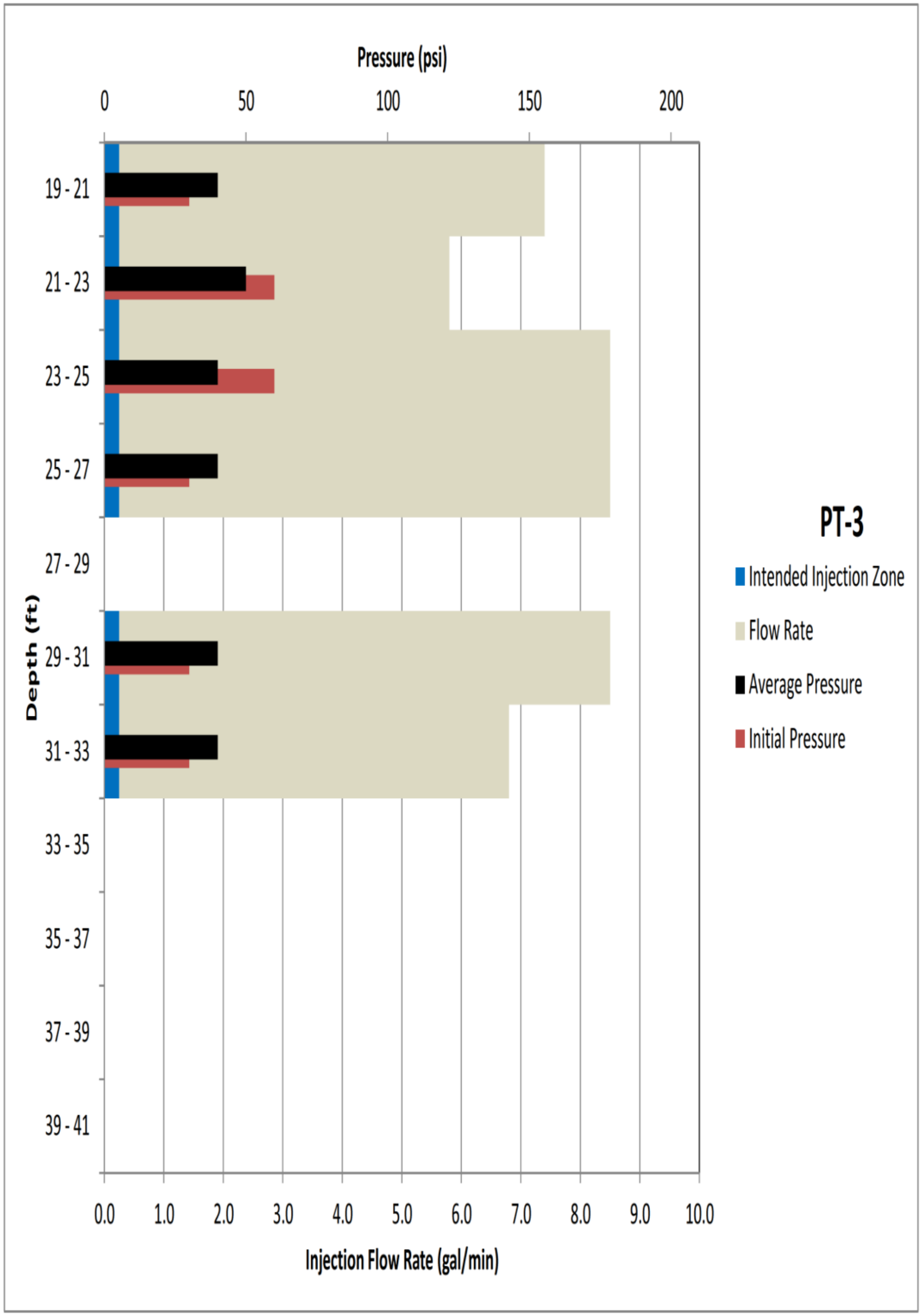


Note:
Borehole log on left is for adjacent well HG-36SE.

TITLE:	REAGENT FLOW RATE FOR PT-3 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida

TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	LD	PT-3d
	PROJECT #	117-2201329	
	DATE	4-21-14	





TITLE:

REAGENT FLOW RATE FOR PT-3
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

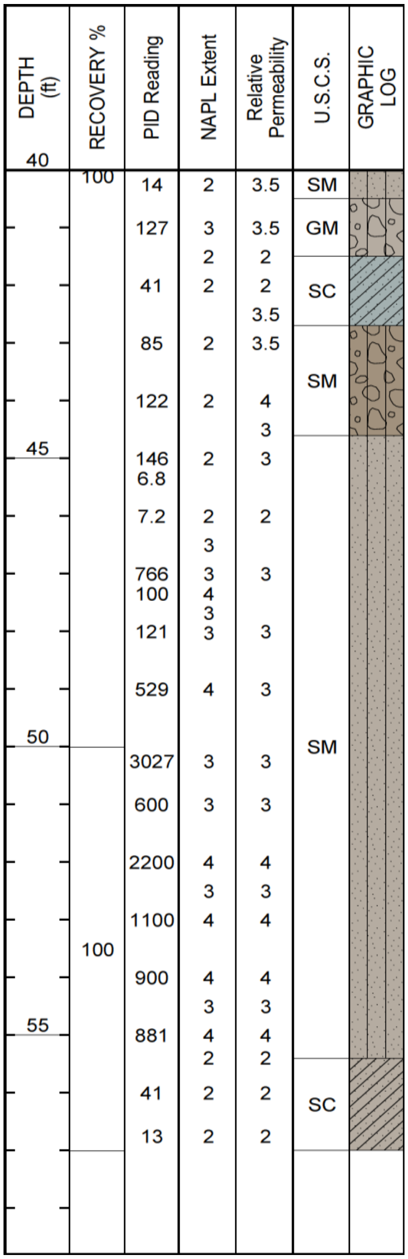
LOCATION:

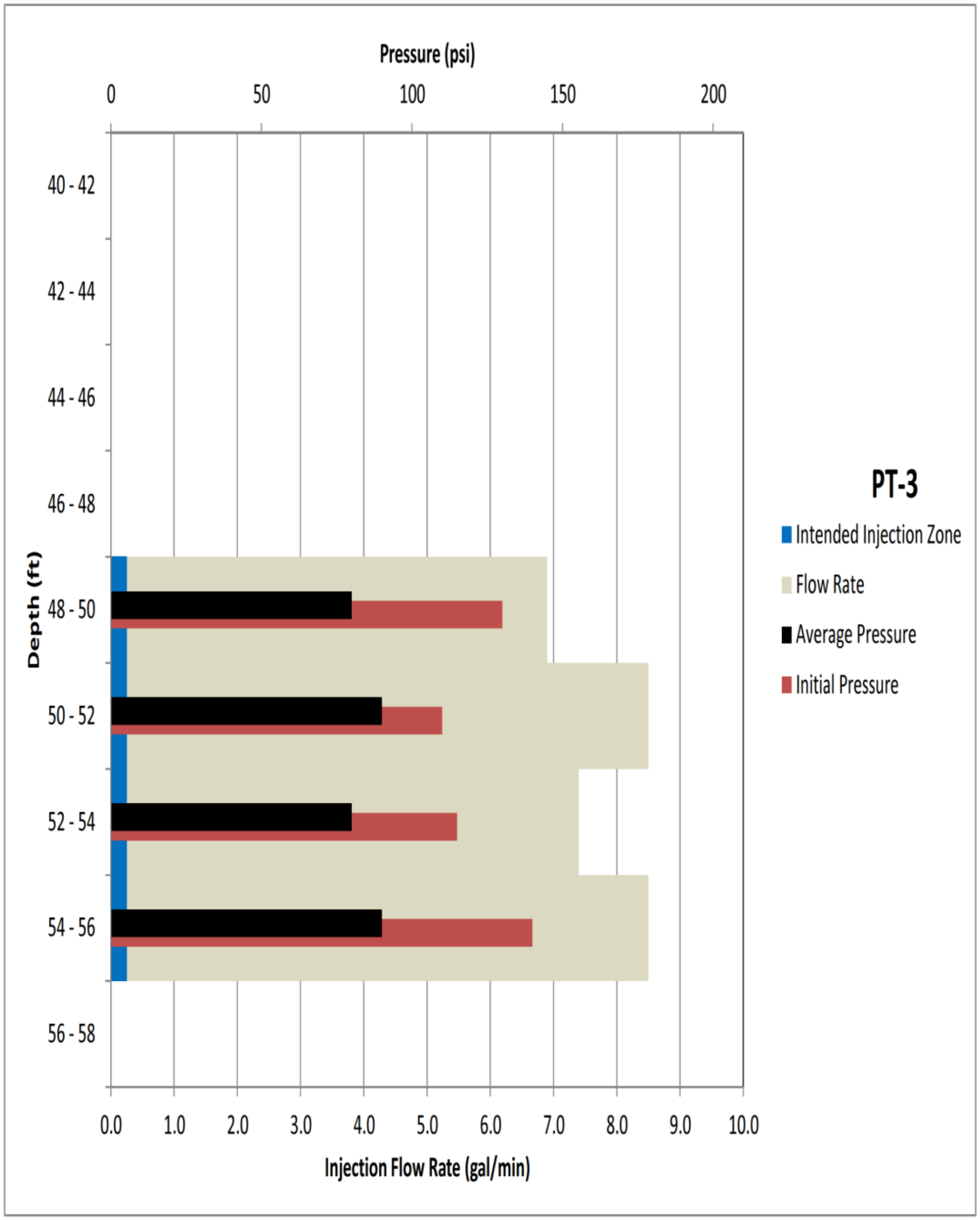
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-3e**
PROJECT #	117-2201329	
DATE	4-21-14	

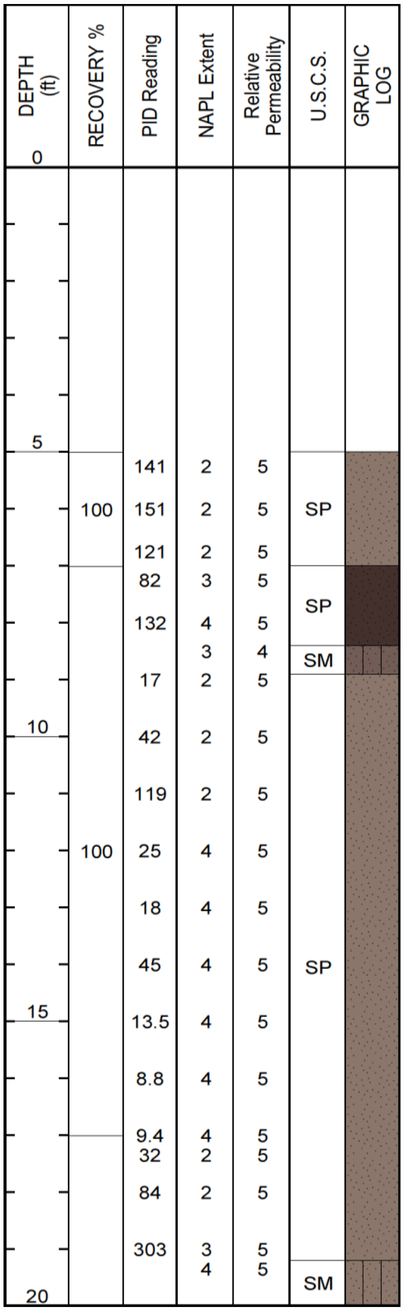
Note:
Borehole log on left is for adjacent well HG-36SE.

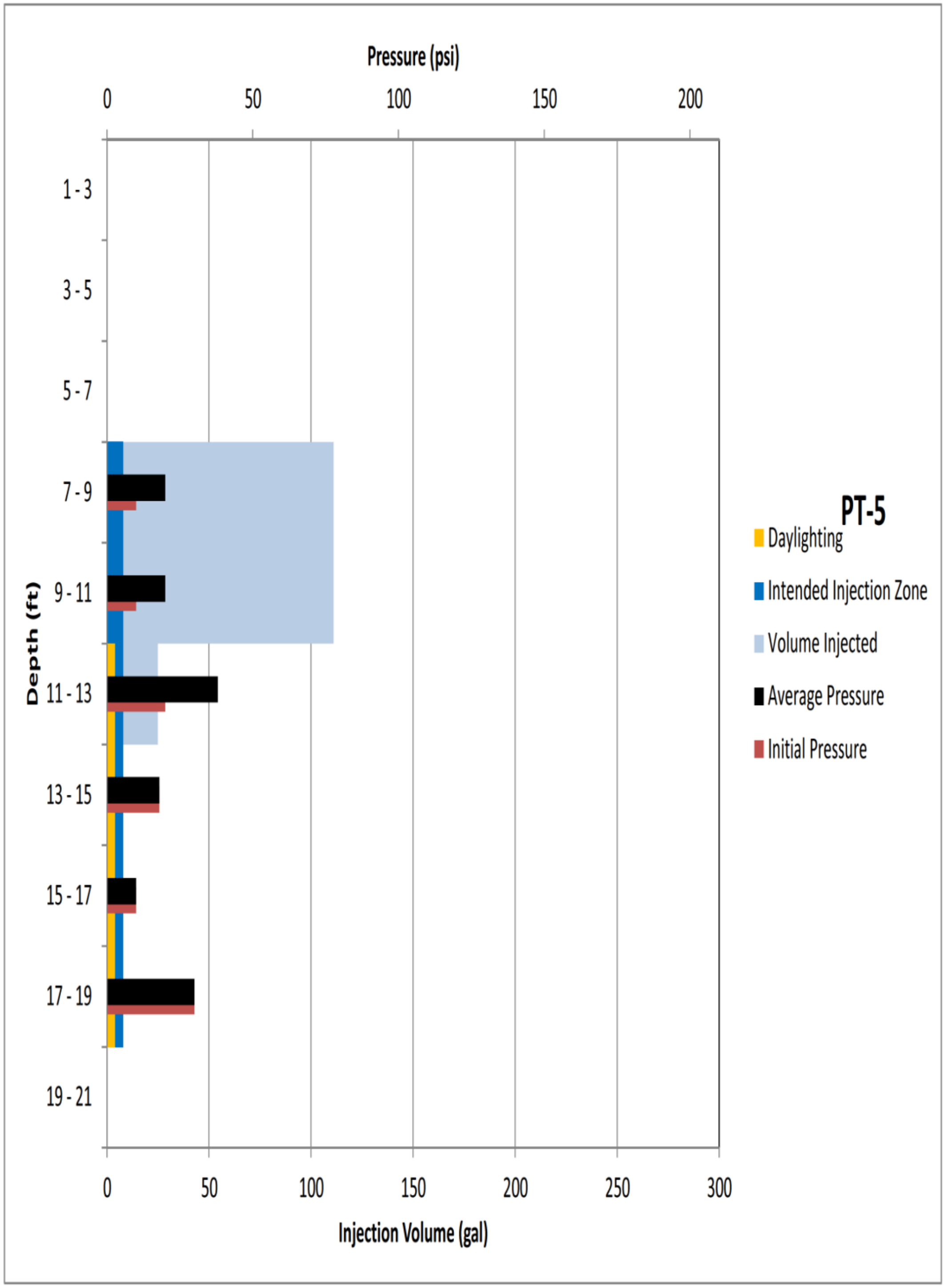




Note:
Borehole log on left is for adjacent well HG-36SE.

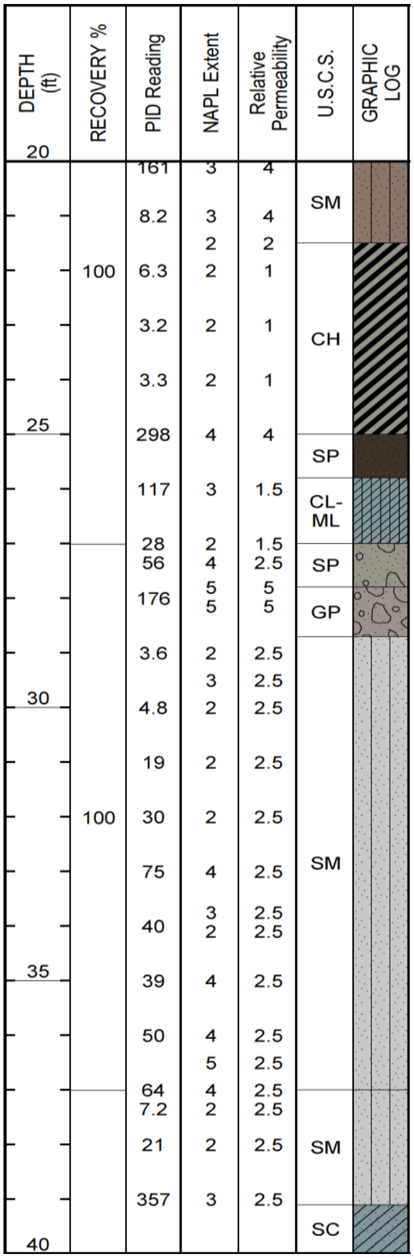
TITLE:	REAGENT FLOW RATE FOR PT-3 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES		
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida		
TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	LD	PT-3f
	PROJECT #	117-2201329	
	DATE	4-21-14	

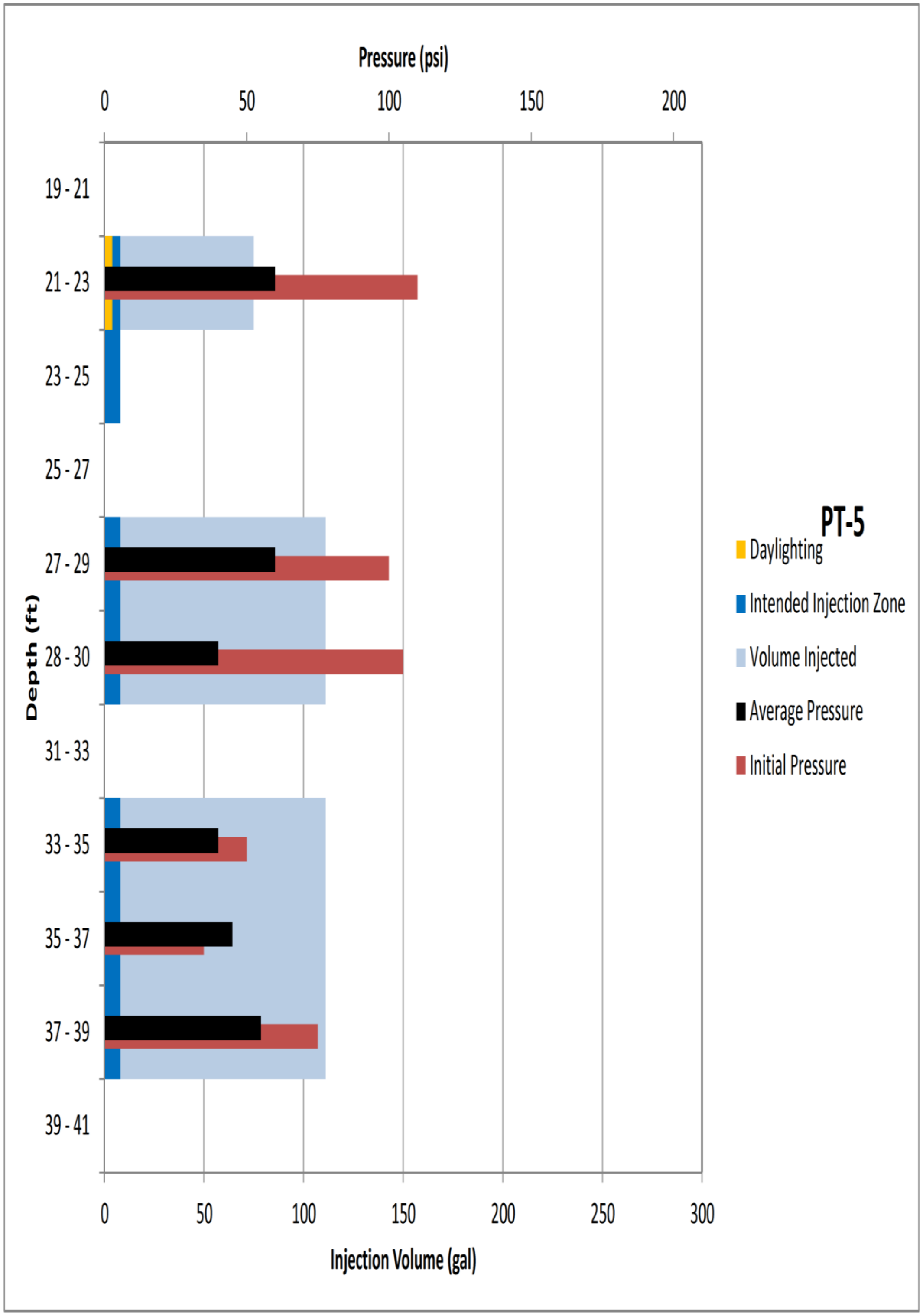




TITLE:	REAGENT VOLUME INJECTED INTO PT-5 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES			
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida			
TETRA TECH	APPROVED	JE	FIGURE	
	DRAFTED	LD	PT-5a	
	PROJECT #	117-2201329		
	DATE	4-21-14		

Note:
Borehole log on left is for adjacent TIP 400N/380E.





TITLE:

REAGENT VOLUME INJECTED INTO PT-5
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:

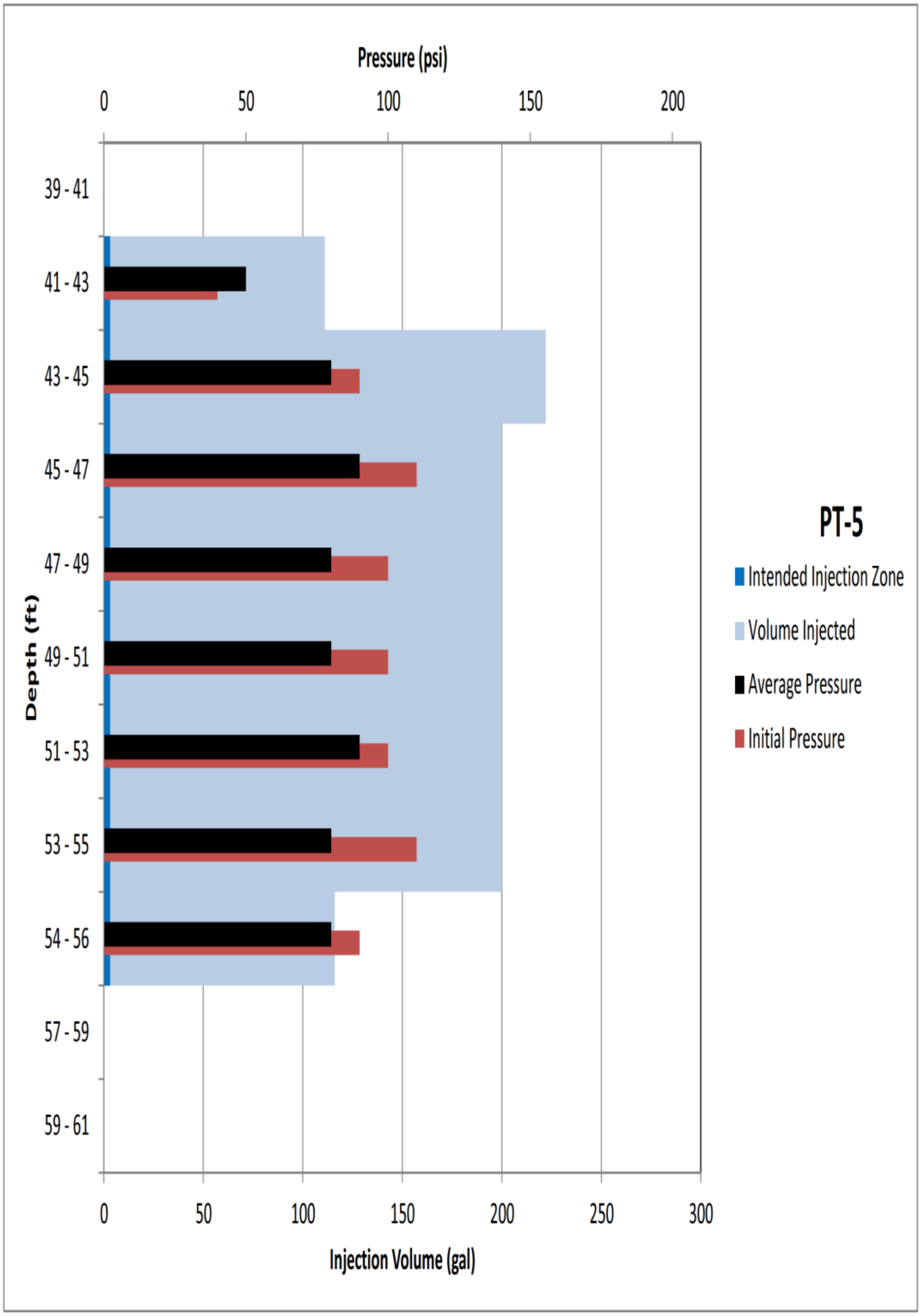
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-5b**
PROJECT #	117-2201329	
DATE	4-21-14	

Note:
Borehole log on left is for adjacent TIP 400N/380E.

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.
40		20	2	2	SC
		230	3	5	GP
	100	146	3	5	
		395	4	3	SM
		381	3	3	
45		8.7	3	3	
		252	2 5 5 5	3 5 3 5	
		303 486	5 5 5	5 3 2.5	
		367	5	2	
		215	5	2.5	
50		410	5	2.5	
		146	5	2.5	SM
	100	269	5	2.5	
		445	5	2.5	
		383	4	2.5	
55		94	4	2.5	
		2	2	2	CL-ML
		1.6 1.7	2 2	2 2.5	
		4.8	2	2.5	SM
		3.2	2	2.5	
60					



TITLE:
REAGENT VOLUME INJECTED INTO PT-5 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

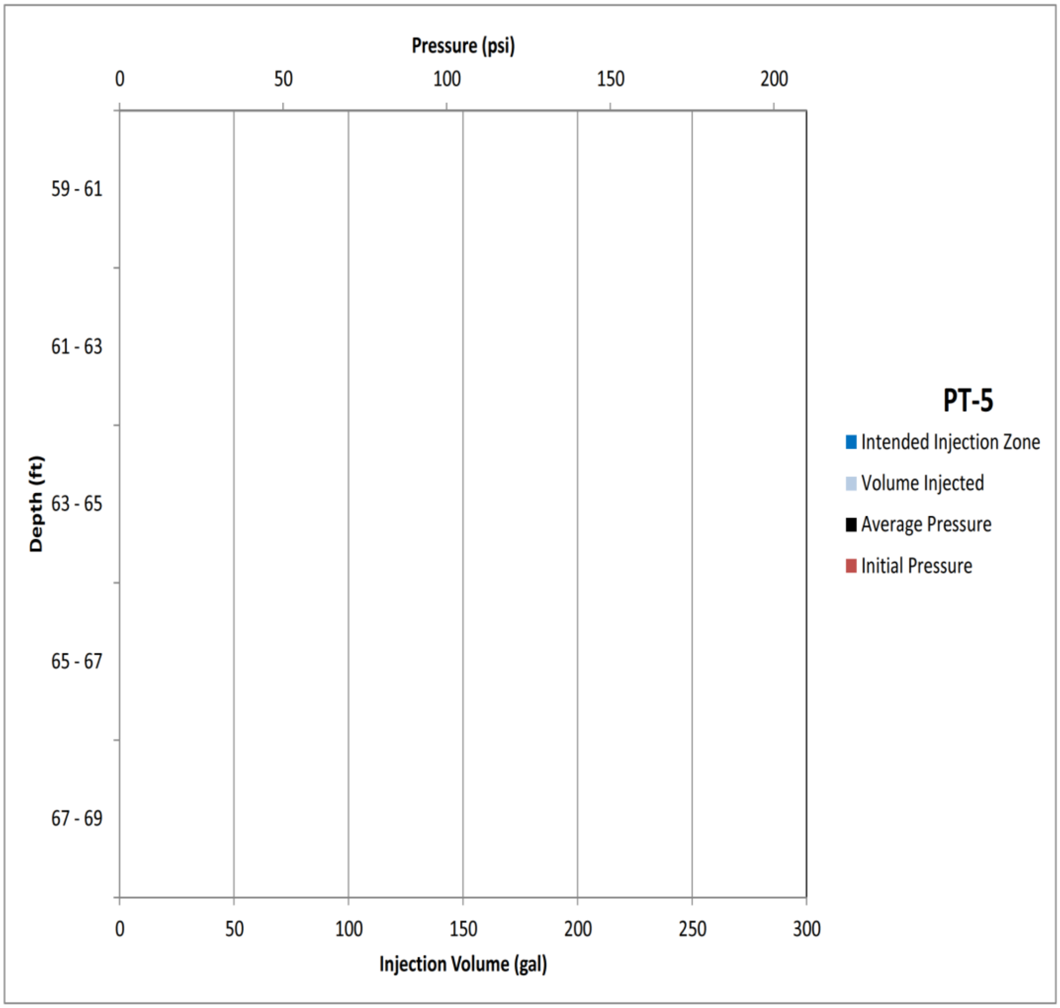
LOCATION:
Cabot Carbon/Koppers Superfund Site Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE	
DRAFTED	LD		PT-5c
PROJECT #	117-2201329		
DATE	4-21-14		

Note:
Borehole log on left is for adjacent TIP 400N/380E.

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
60		3.2	2	2.5	SM	
		2	2	2.5		
	100	1.8	2	2.5		
		0.6	1	2.5		
		0.2	1	2	SC-SM	
65		0.3	1	2		
		0.0	1	2	CL-ML	
		0.0	1	1.5		
		0.0	1	1.5	CL	
	100	0.0	1	1.5		
		0.0	1	1.5		



TITLE:

REAGENT VOLUME INJECTED INTO PT-5
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

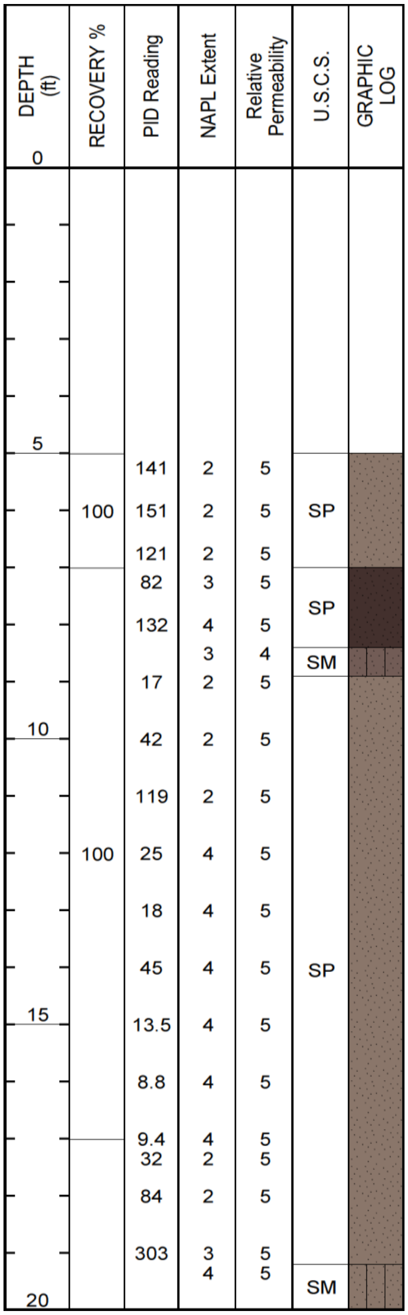
LOCATION:

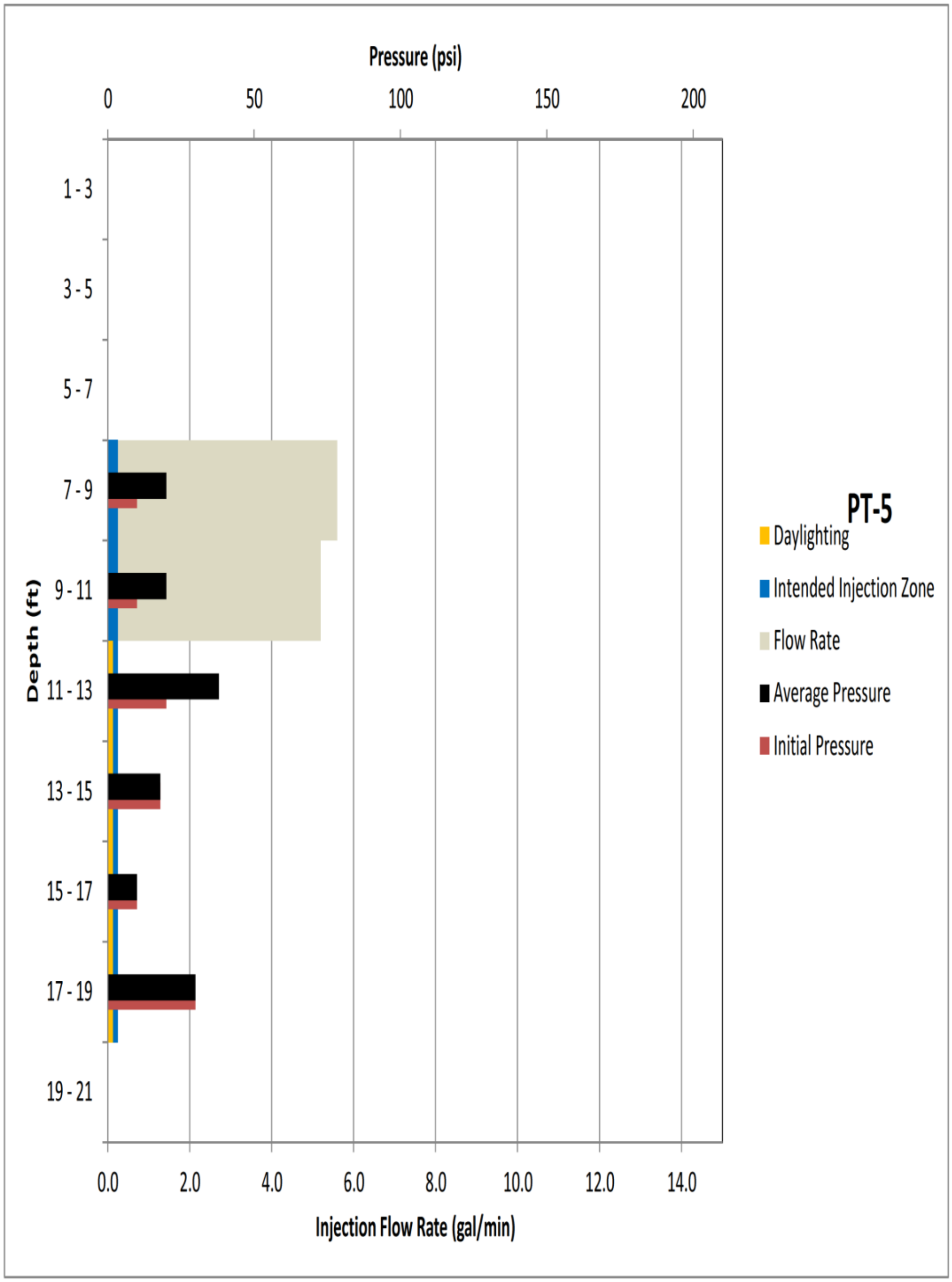
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-5d**
PROJECT #	117-2201329	
DATE	4-21-14	

Note:
Borehole log on left is for adjacent TIP 400N/380E.





TITLE:

REAGENT FLOW RATE FOR PT-5
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

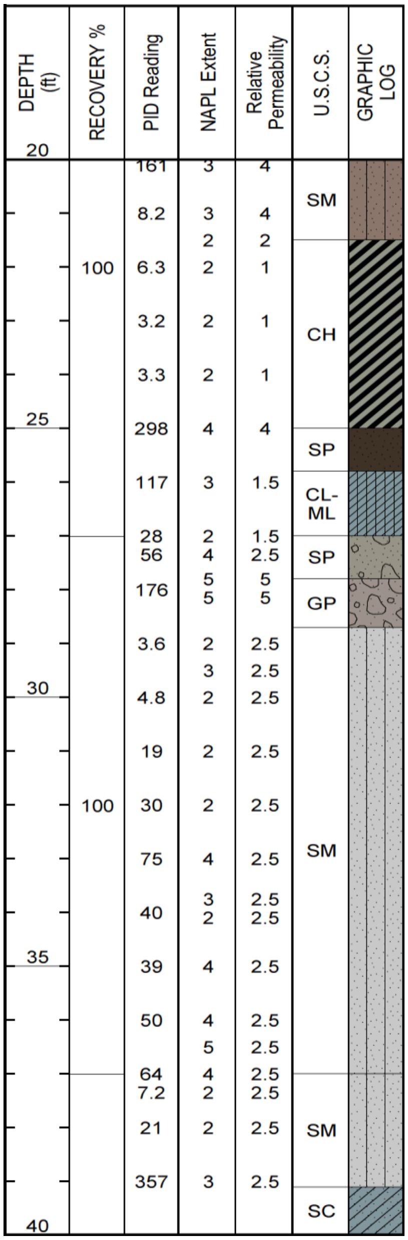
LOCATION:

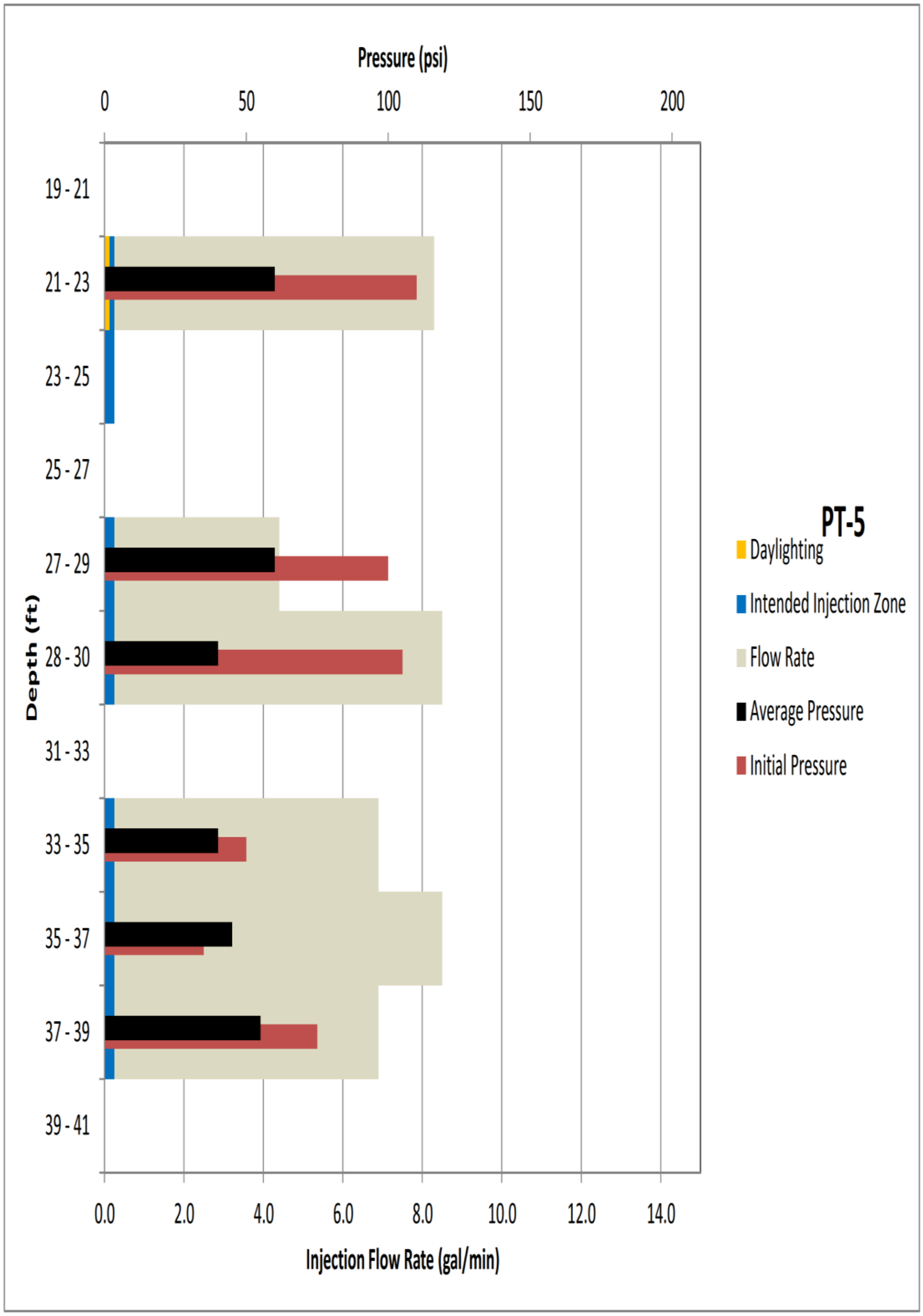
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-5e**
PROJECT #	117-2201329	
DATE	4-28-14	

Note:
Borehole log on left is for adjacent TIP 400N/380E.





TITLE:

REAGENT FLOW RATE FOR PT-5
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

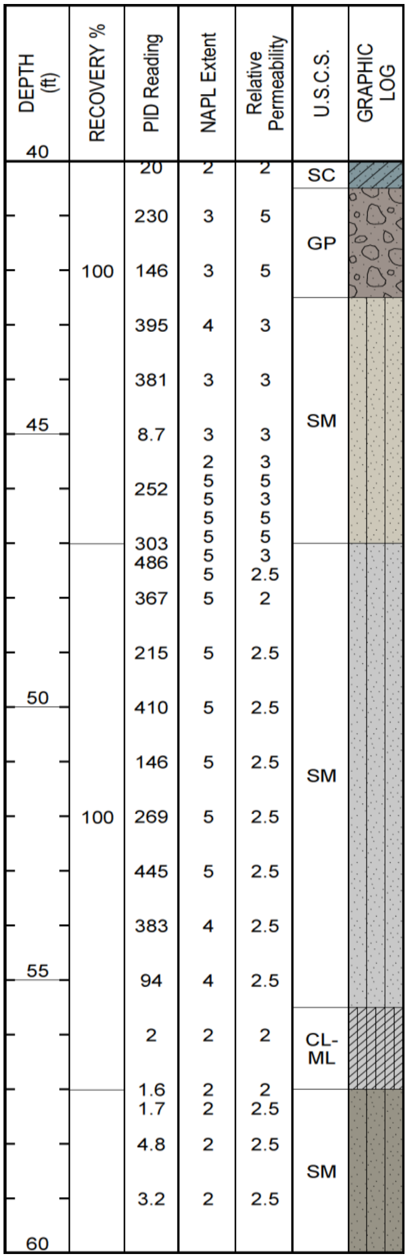
LOCATION:

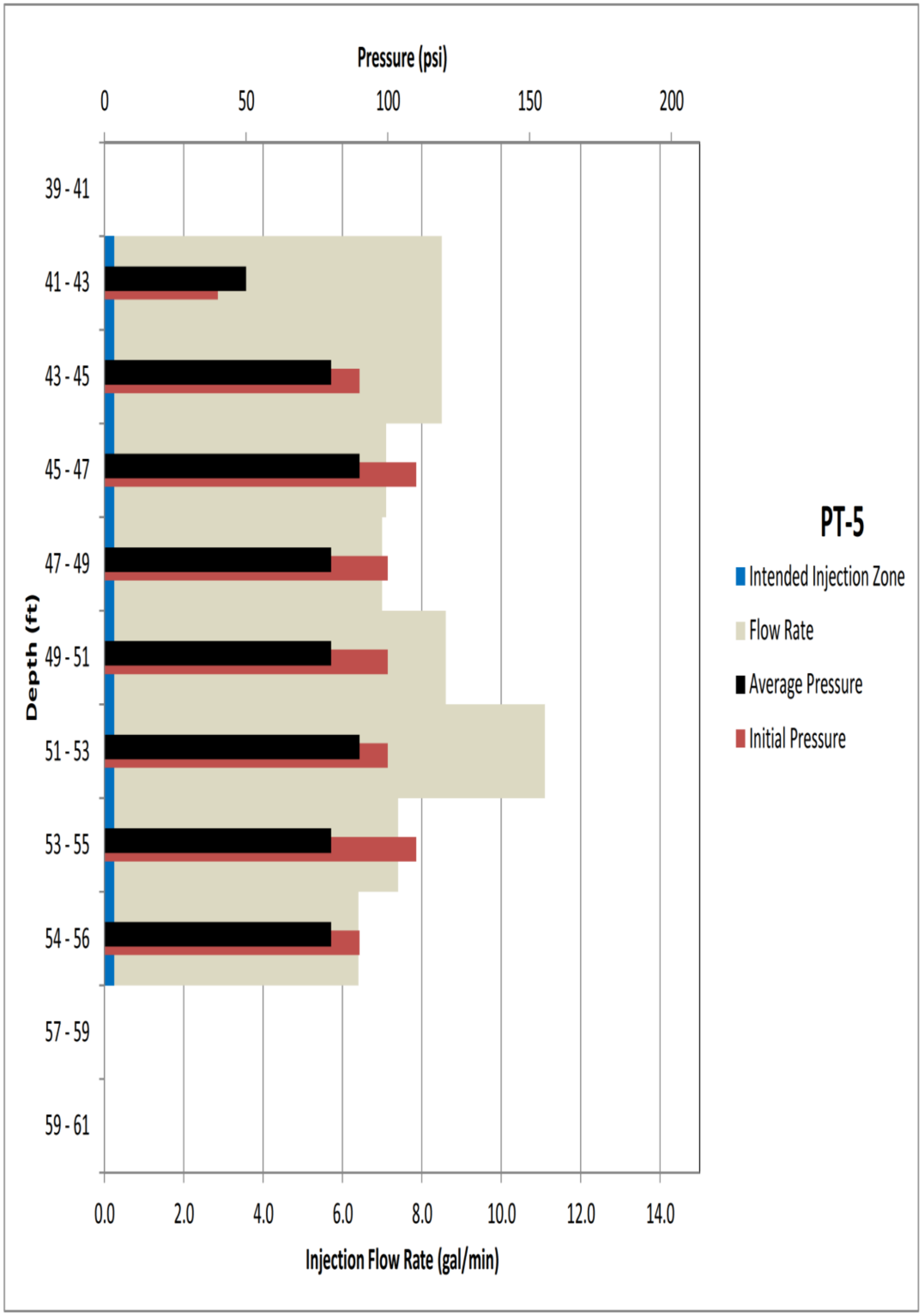
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-5f**
PROJECT #	117-2201329	
DATE	4-28-14	

Note:
Borehole log on left is for adjacent TIP 400N/380E.





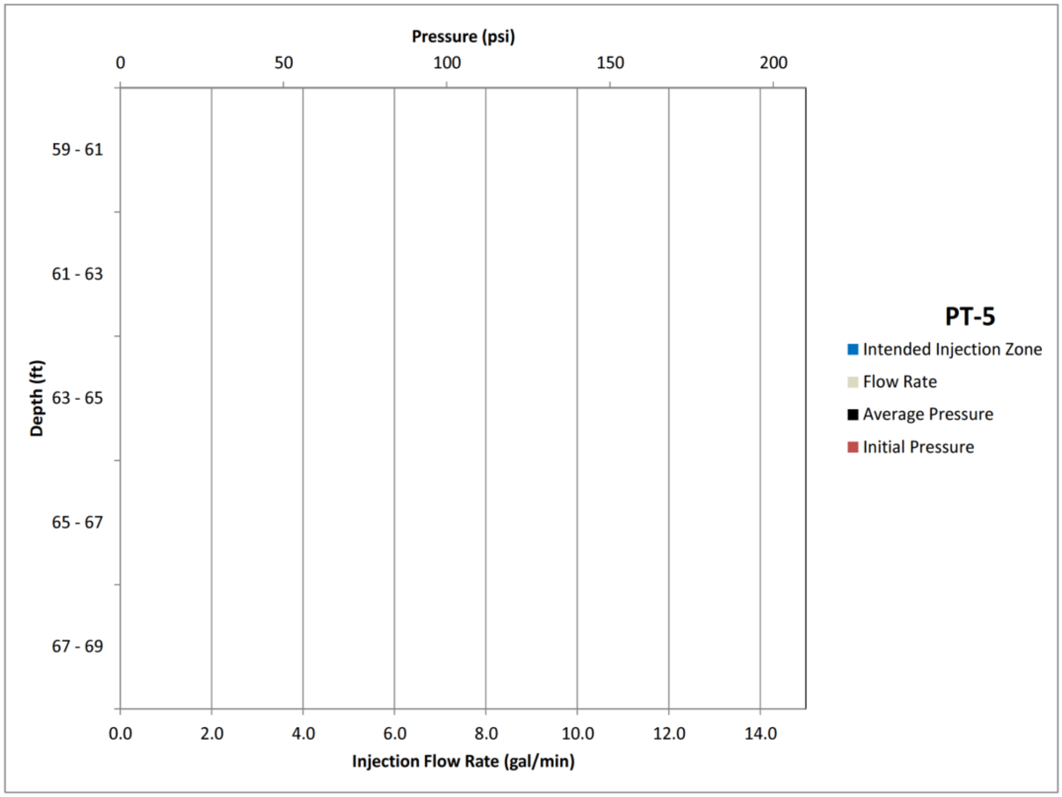
Note:
Borehole log on left is for adjacent TIP 400N/380E.

TITLE:	REAGENT FLOW RATE FOR PT-5 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	PT-5g
PROJECT #	117-2201329	
DATE	4-28-14	

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
60		3.2	2	2.5		
		2	2	2.5		
	100	1.8	2	2.5	SM	
		0.6	1	2.5		
		0.2	1	2		
65		0.3	1	2	SC-SM	
		0.0	1	2		
		0.0	1	1.5	CL-ML	
		0.0	1	1.5		
	100	0.0	1	1.5	CL	
		0.0	1	1.5		



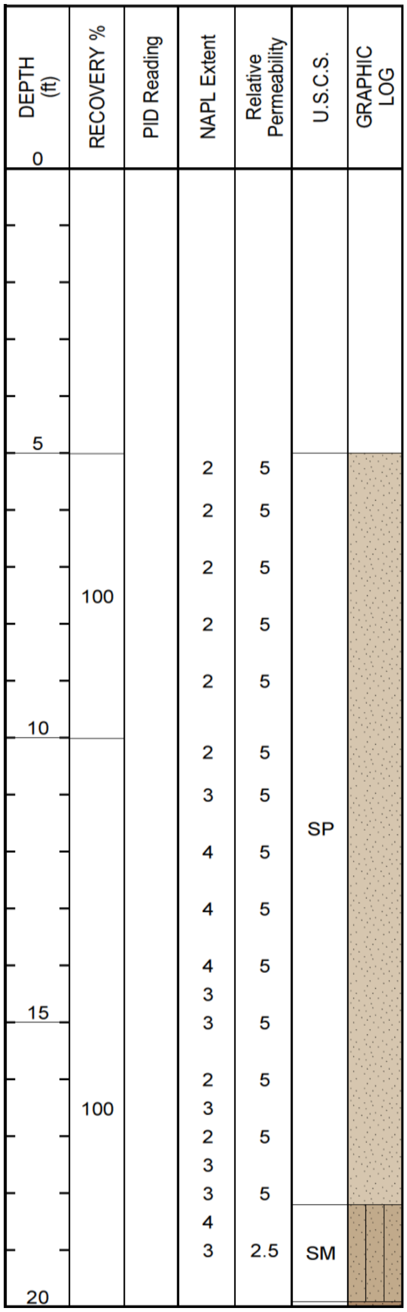
Note:
Borehole log on left is for adjacent TIP 400N/380E.

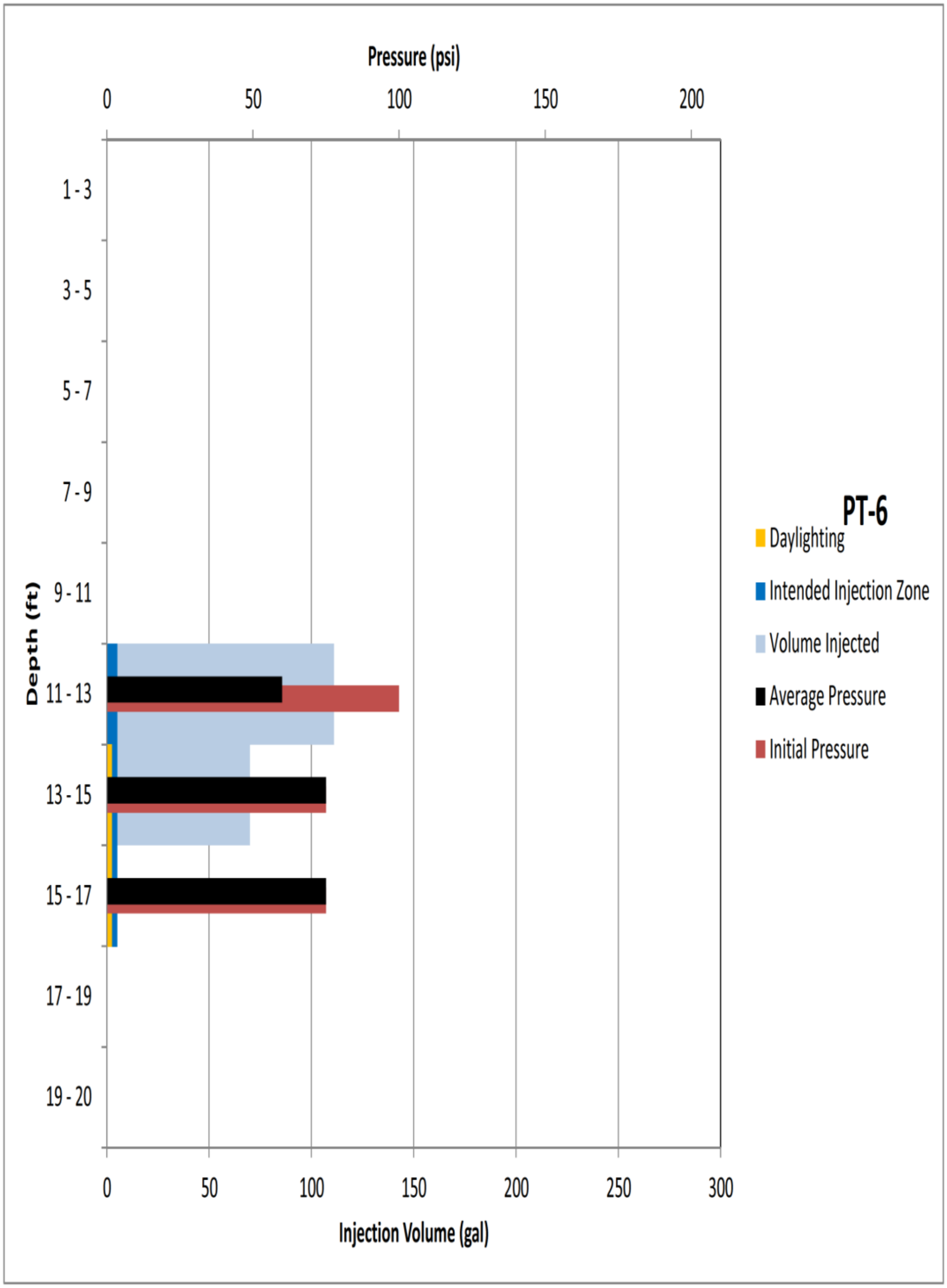
TITLE:
REAGENT FLOW RATE FOR PT-5
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-5h**
PROJECT #	117-2201329	
DATE	4-28-14	





Note:
Borehole log on left is for adjacent well HG-36SE.

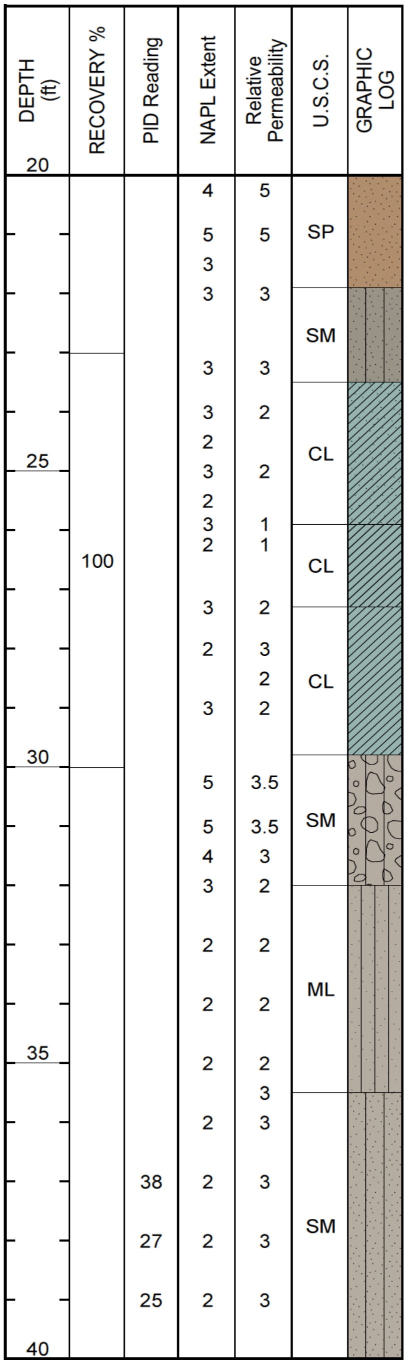
TITLE:
REAGENT VOLUME INJECTED INTO PT-6 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

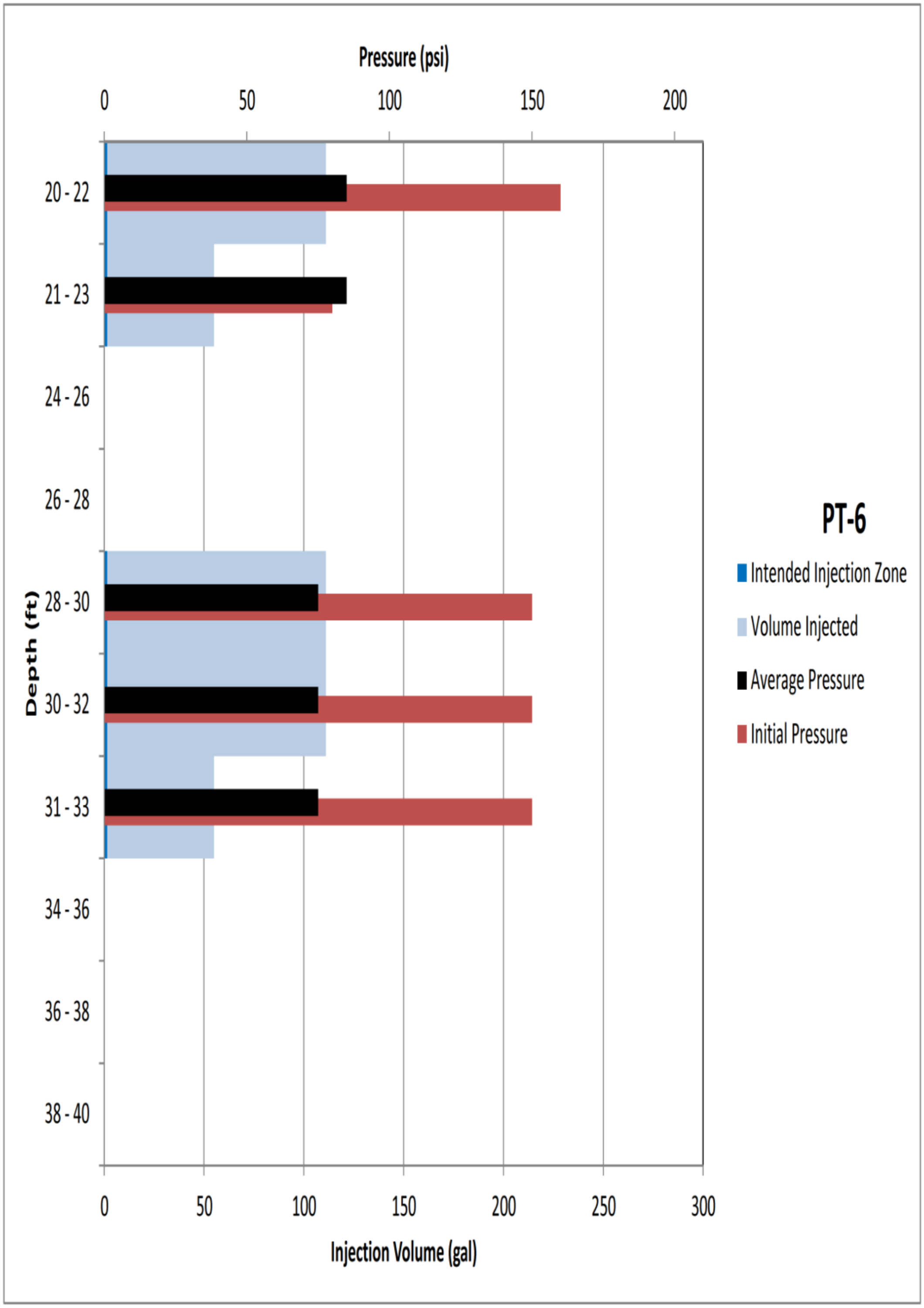
LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE
DRAFTED	LD
PROJECT #	117-2201329
DATE	4-21-14

FIGURE
PT-6a



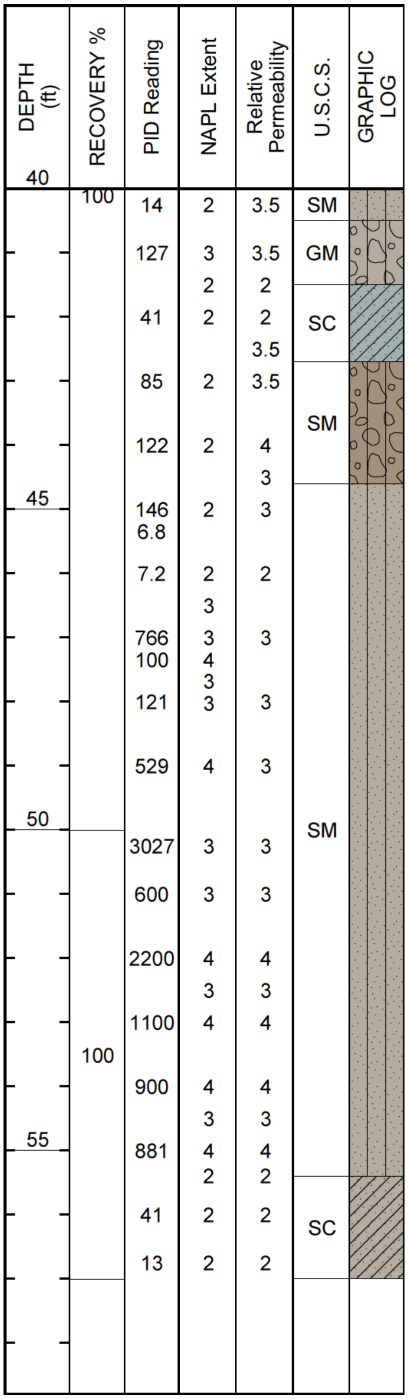


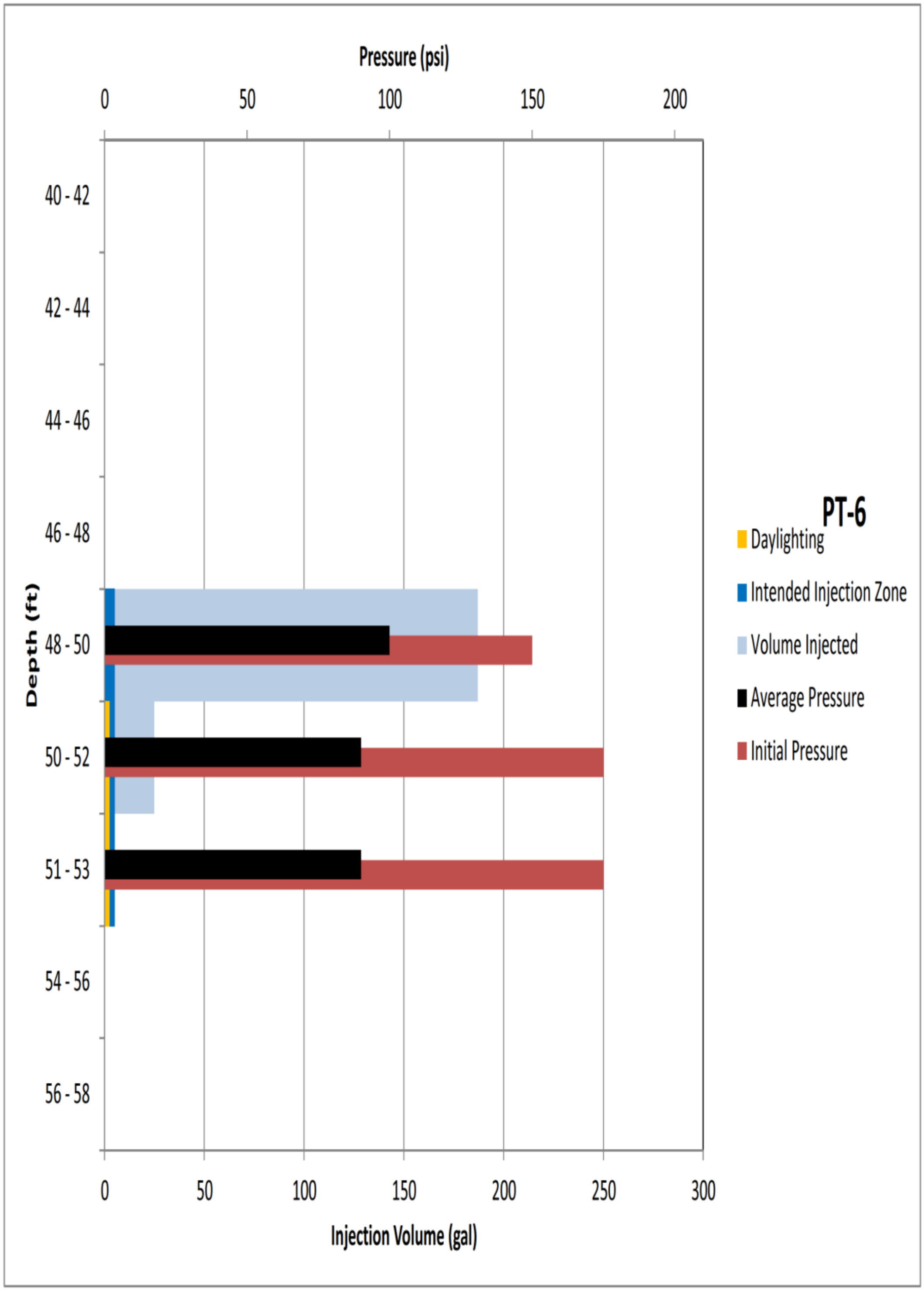
TITLE:	REAGENT VOLUME INJECTED INTO PT-6 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	PT-6b
PROJECT #	117-2201329	
DATE	4-21-14	

Note:
Borehole log on left is for adjacent well HG-36SE.





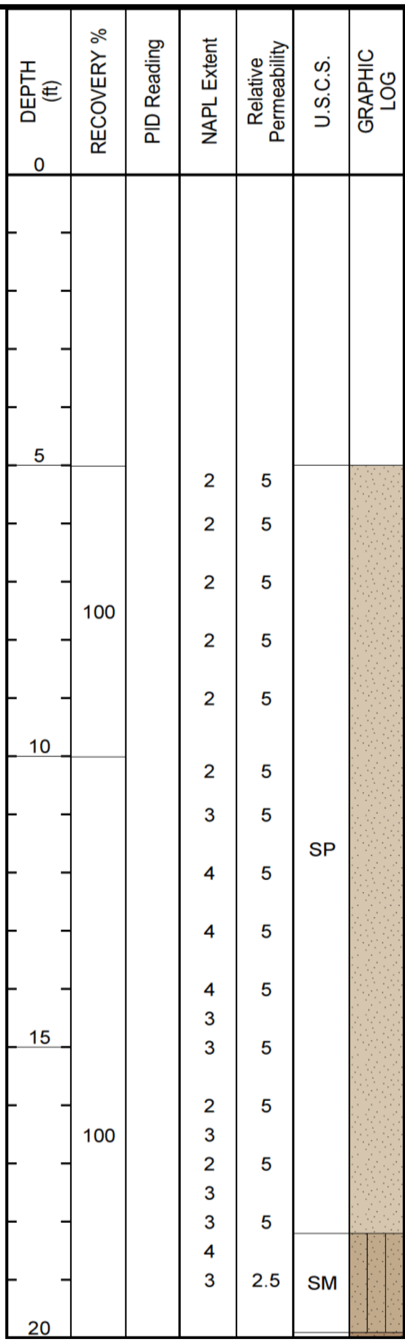
TITLE: **REAGENT VOLUME INJECTED INTO PT-6 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

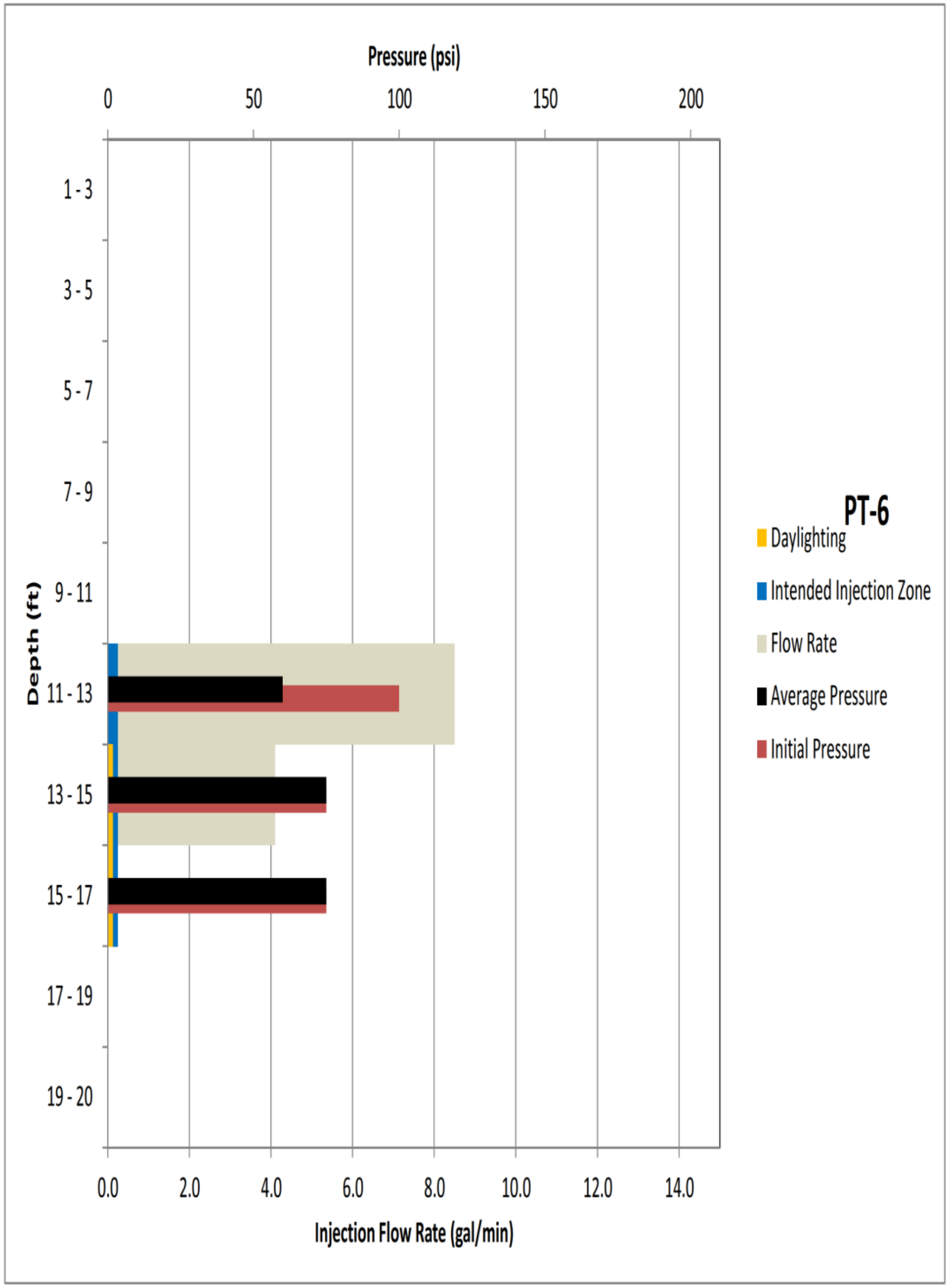
LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-6c**
PROJECT #	117-2201329	
DATE	4-21-14	

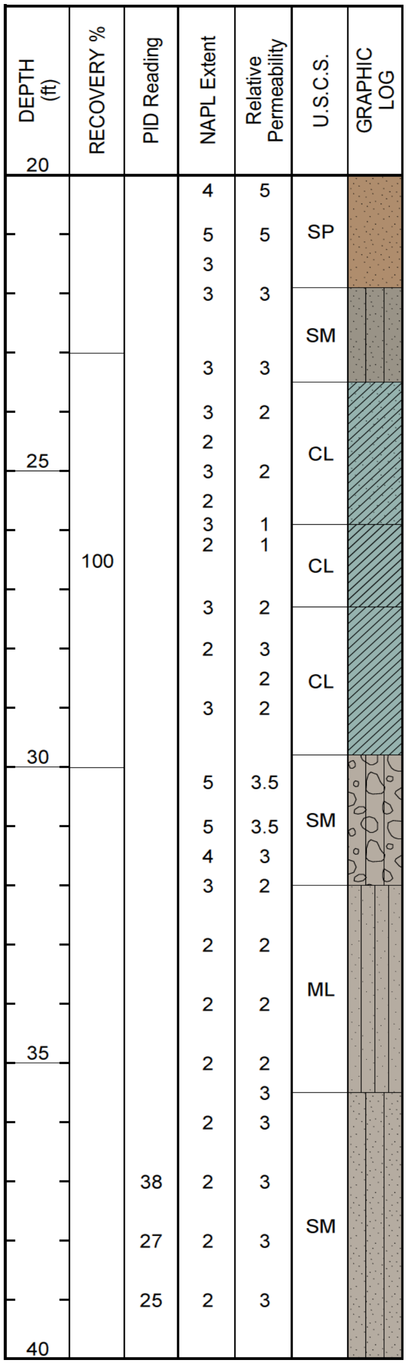
Note:
Borehole log on left is for adjacent well HG-36SE.

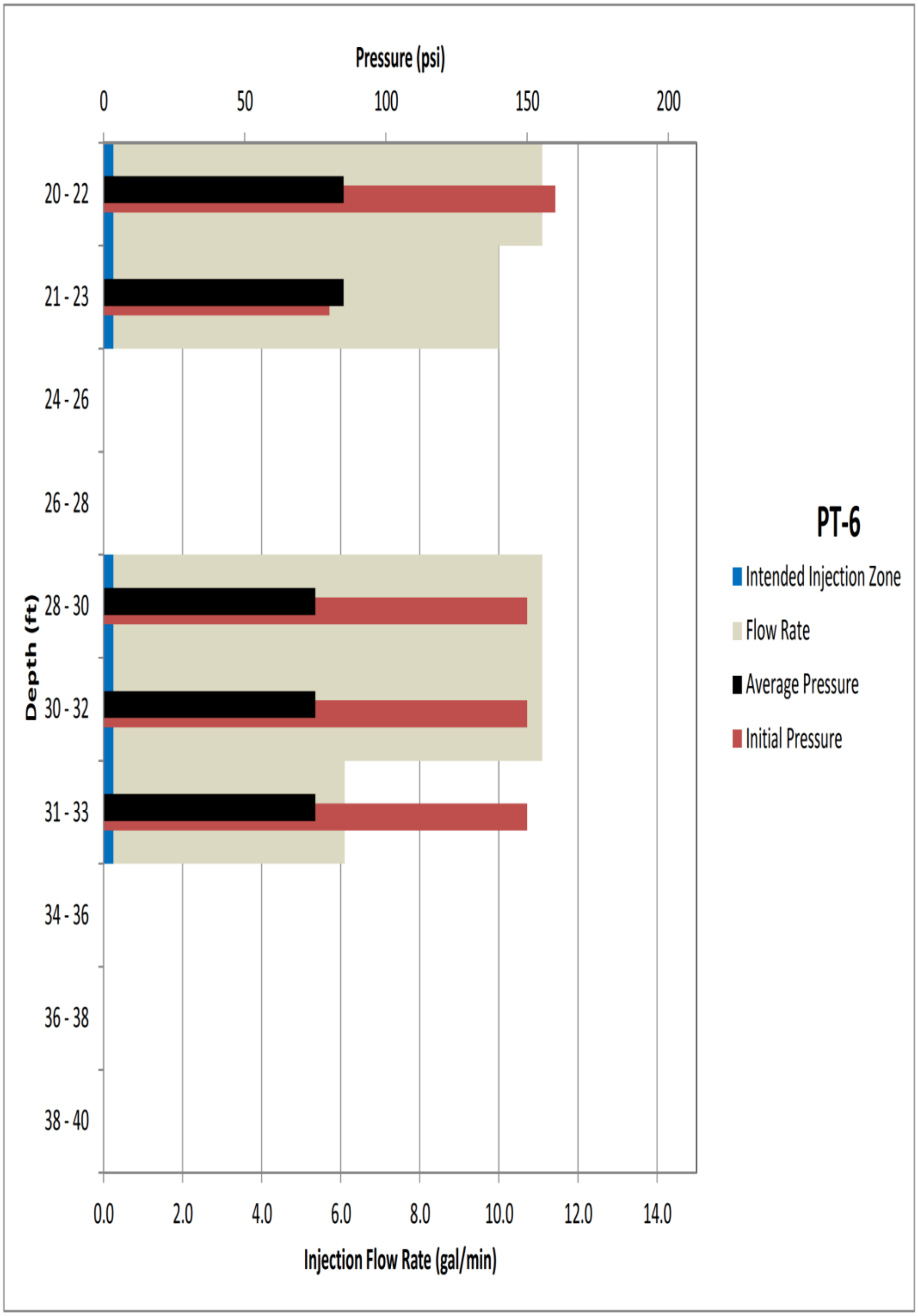




TITLE:	**REAGENT FLOW RATE FOR PT-6 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**			
LOCATION:	**Cabot Carbon/Koppers Superfund Site Gainesville, Florida**			
TETRA TECH	APPROVED	JE	FIGURE	
	DRAFTED	LD		
	PROJECT #	117-2201329	**PT-6d**	
	DATE	4-21-14		

Note:
Borehole log on left is for adjacent well HG-36SE.



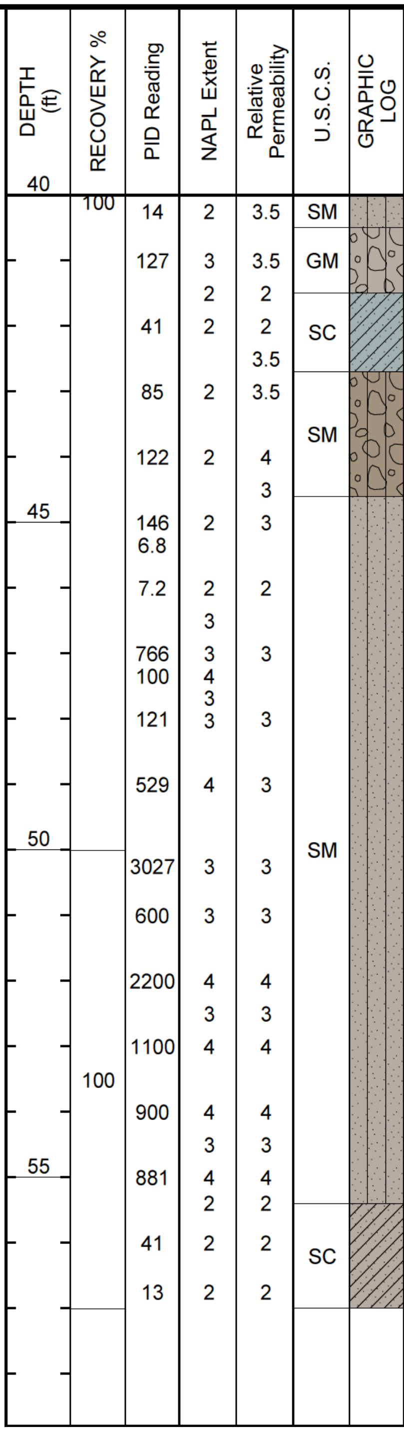


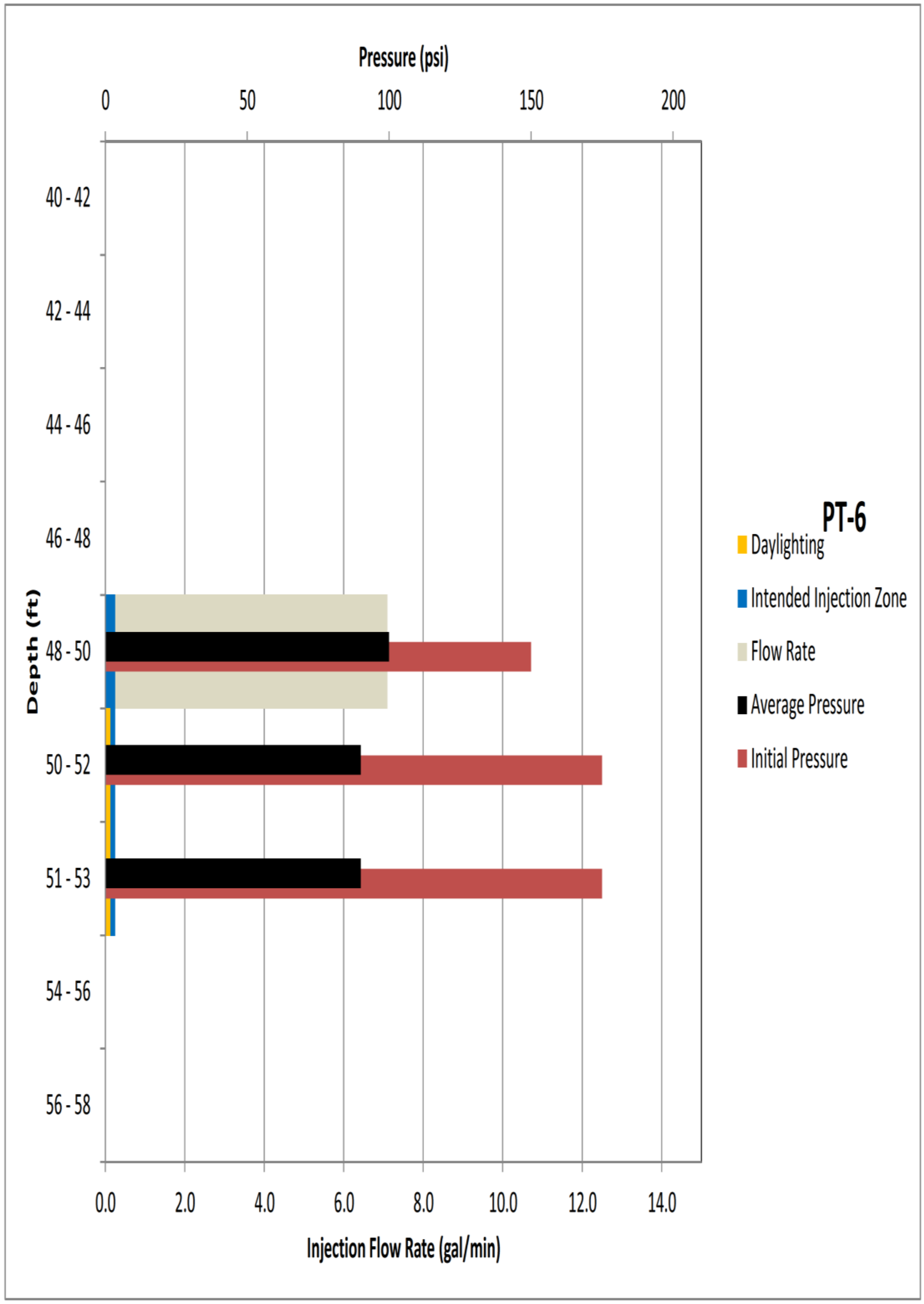
Note:
Borehole log on left is for adjacent well HG-36SE.

TITLE:	**REAGENT FLOW RATE FOR PT-6 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**
LOCATION:	**Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-6e**
PROJECT #	117-2201329	
DATE	4-21-14	





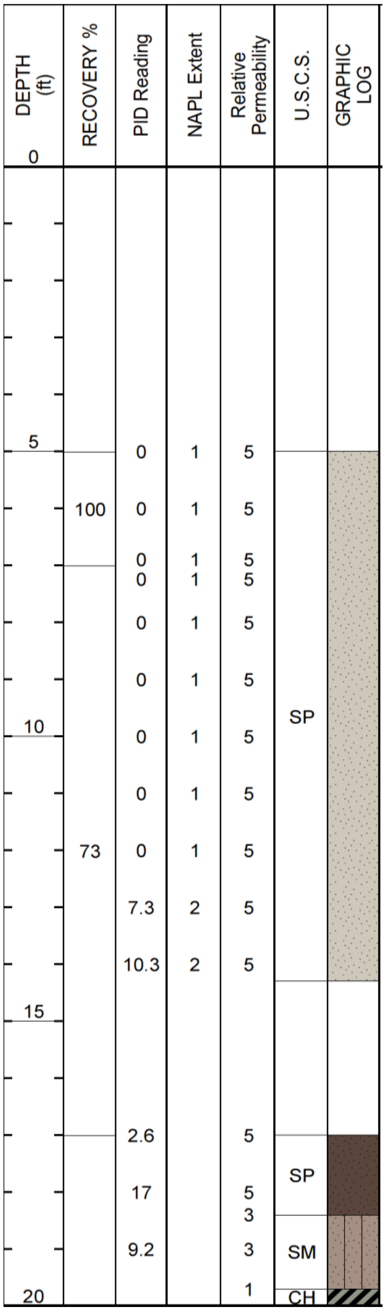
Note:
Borehole log on left is for adjacent well HG-36SE.

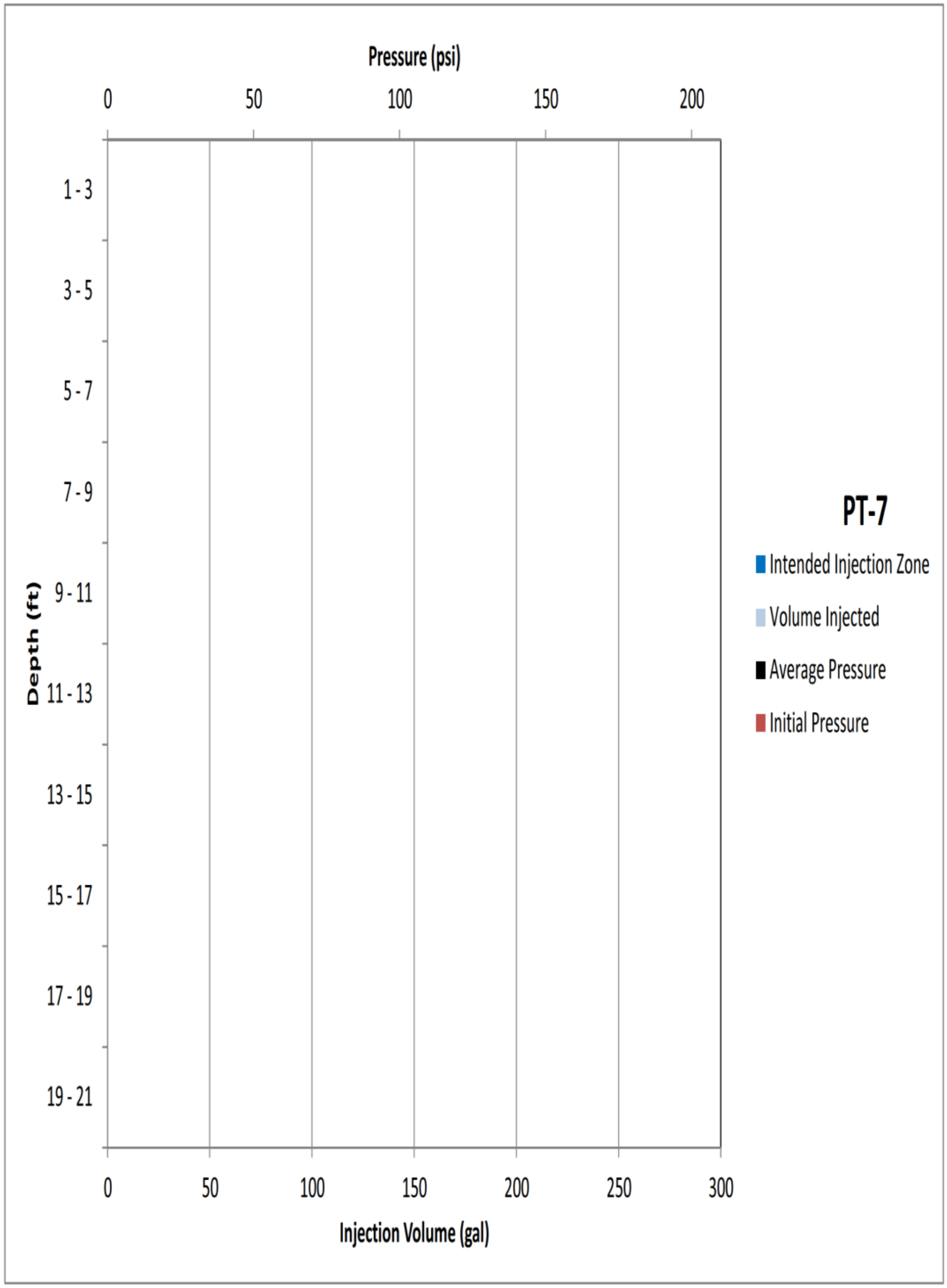
TITLE:
REAGENT FLOW RATE FOR PT-6
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-6f**
PROJECT #	117-2201329	
DATE	4-21-14	





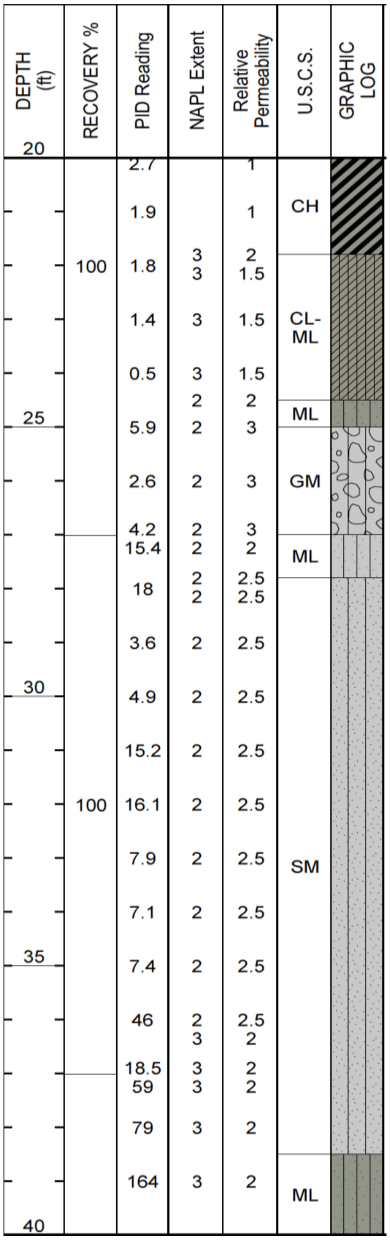
TITLE: **REAGENT INJECTION VOLUME INTO PT-7 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

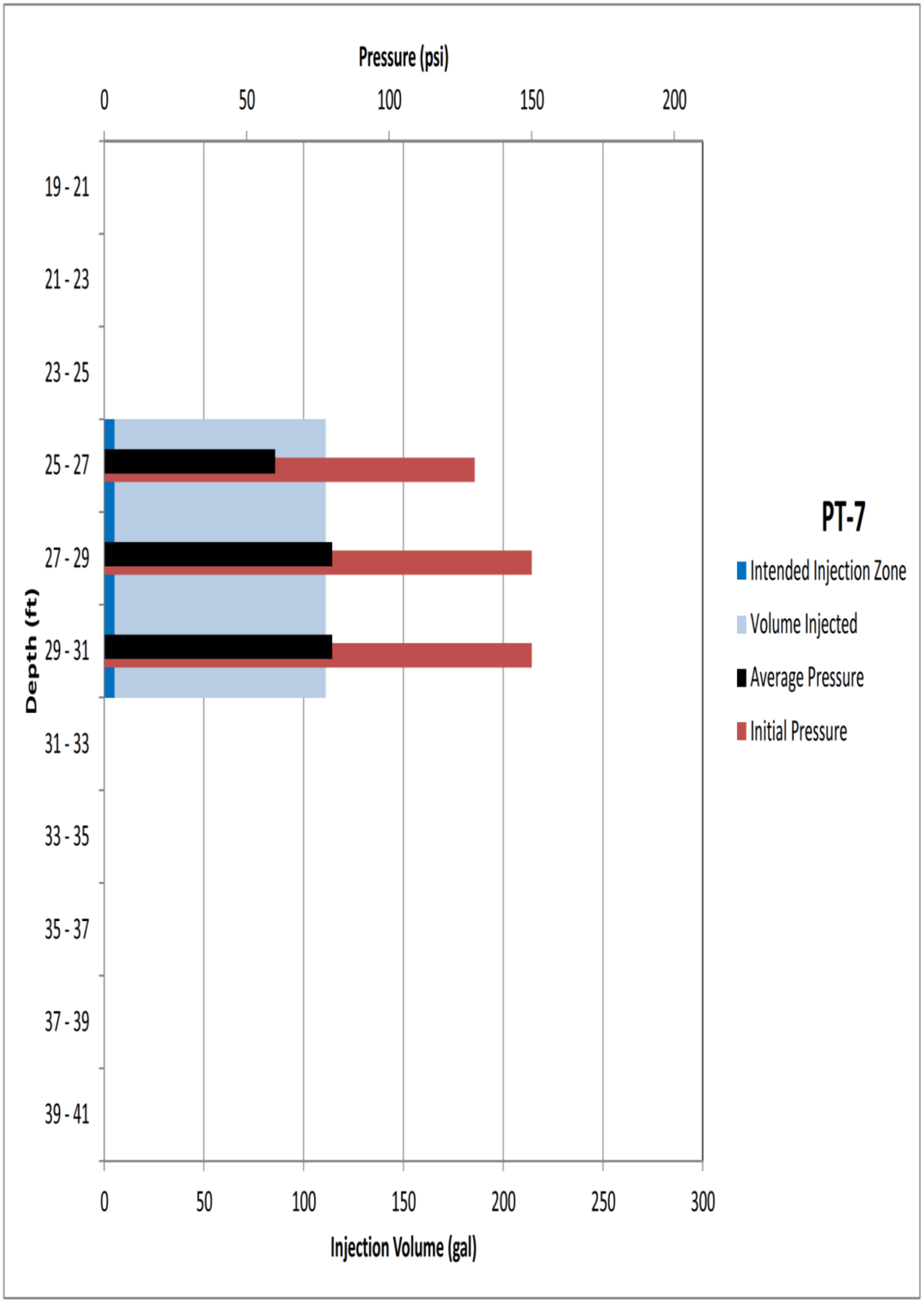
LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-7a**
PROJECT #	117-2201329	
DATE	5-9-14	

Note:
Borehole log on left is for adjacent TIP 440N/380E.



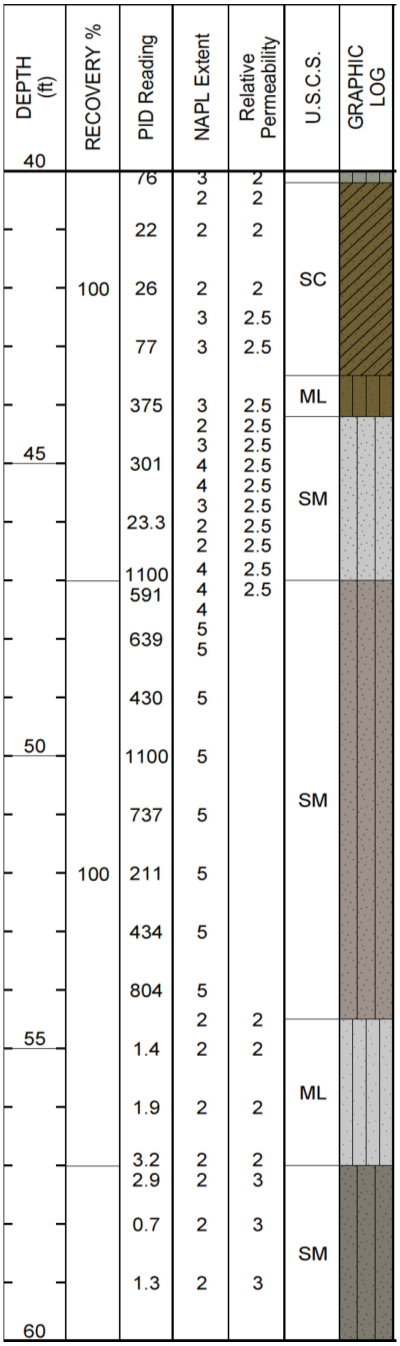


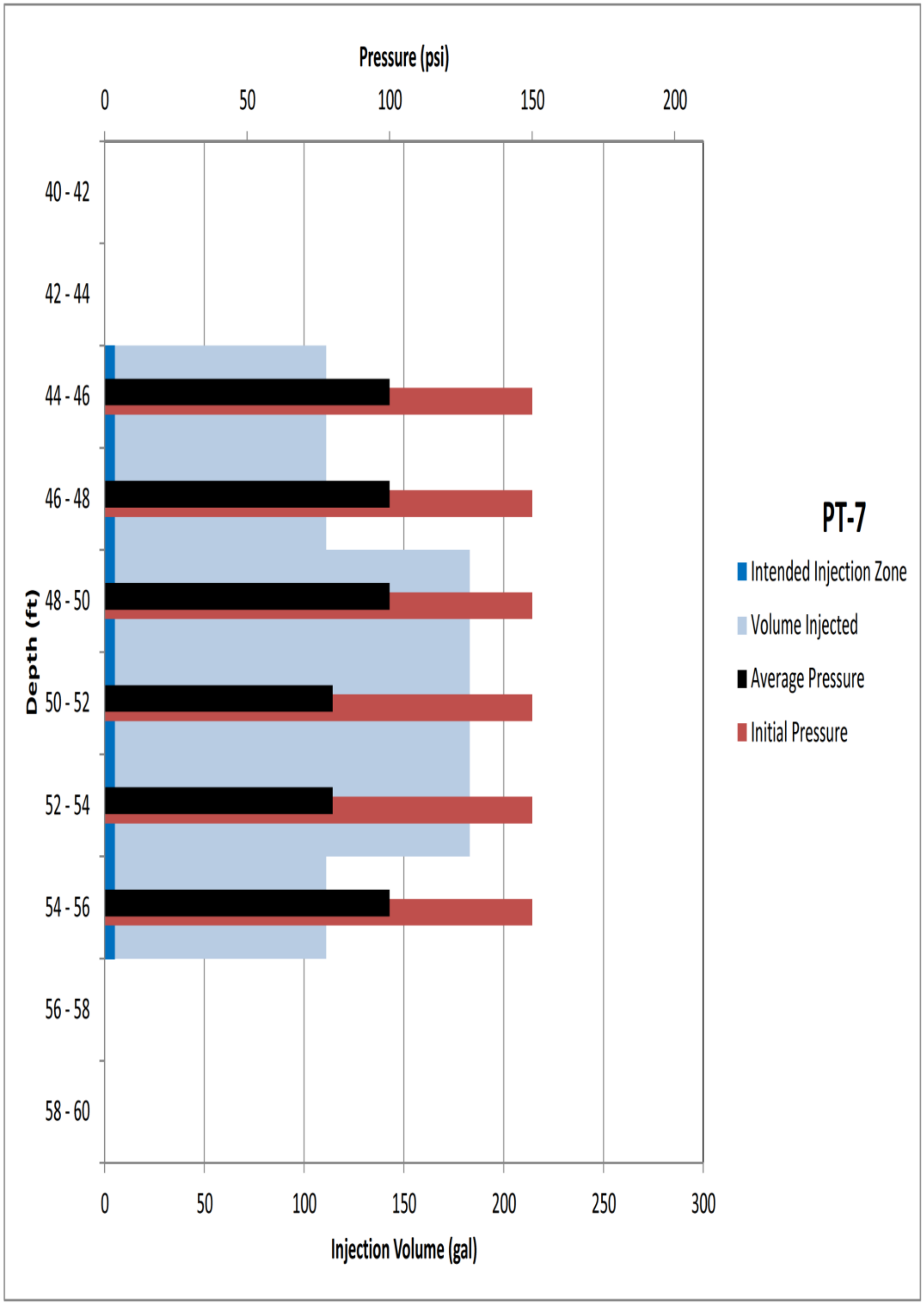
TITLE:	REAGENT INJECTION VOLUME INTO PT-7 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	PT-7b
PROJECT #	117-2201329	
DATE	5-9-14	

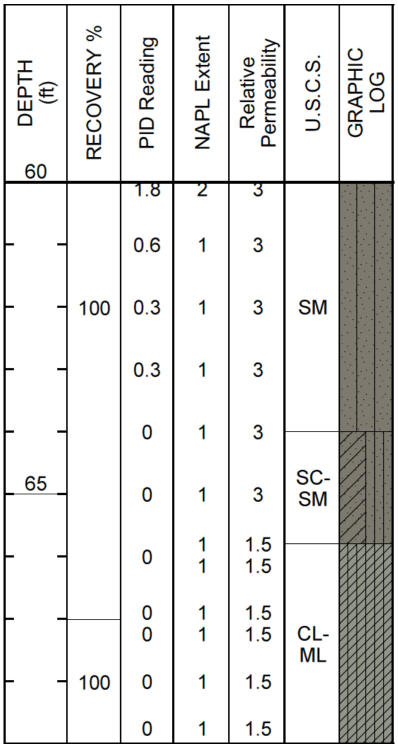
Note:
Borehole log on left is for adjacent TIP 440N/380E.

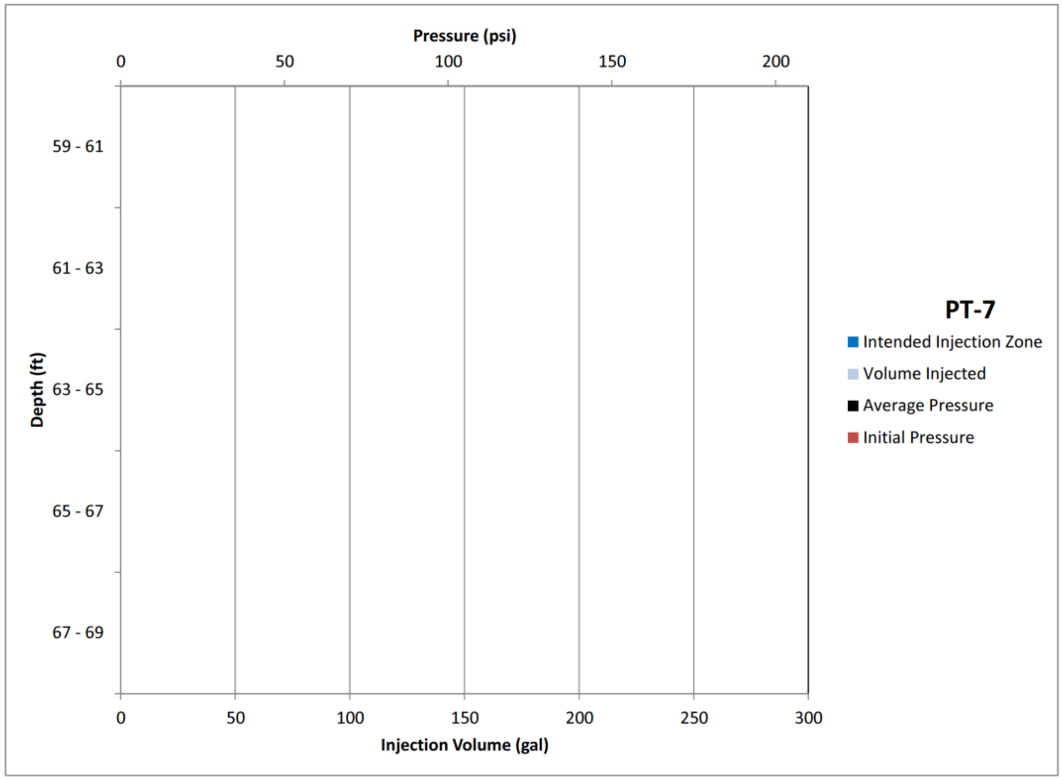




Note:
Borehole log on left is for adjacent TIP 440N/380E.

TITLE:	REAGENT INJECTION VOLUME INTO PT-7 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES		
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida		
TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	LD	PT-7c
	PROJECT #	117-2201329	
	DATE	5-9-14	





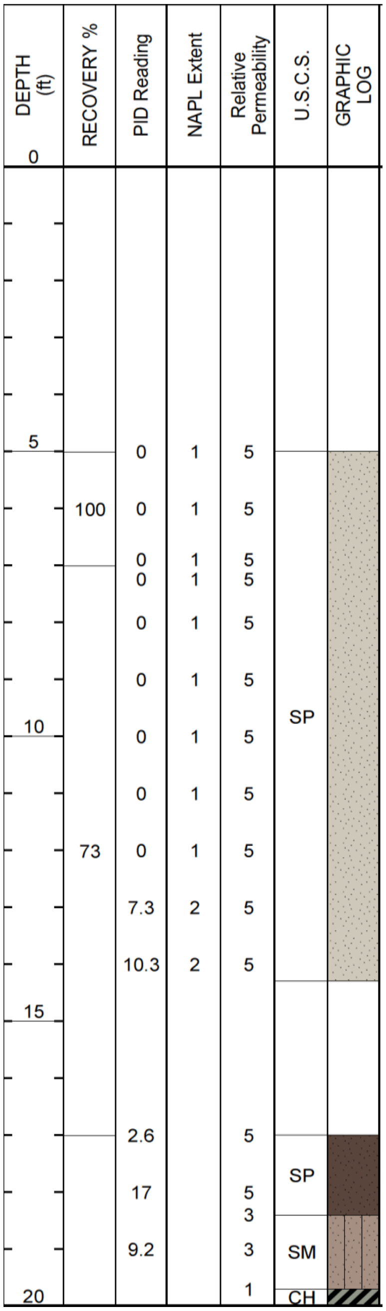
Note:
Borehole log on left is for adjacent TIP 440N/380E.

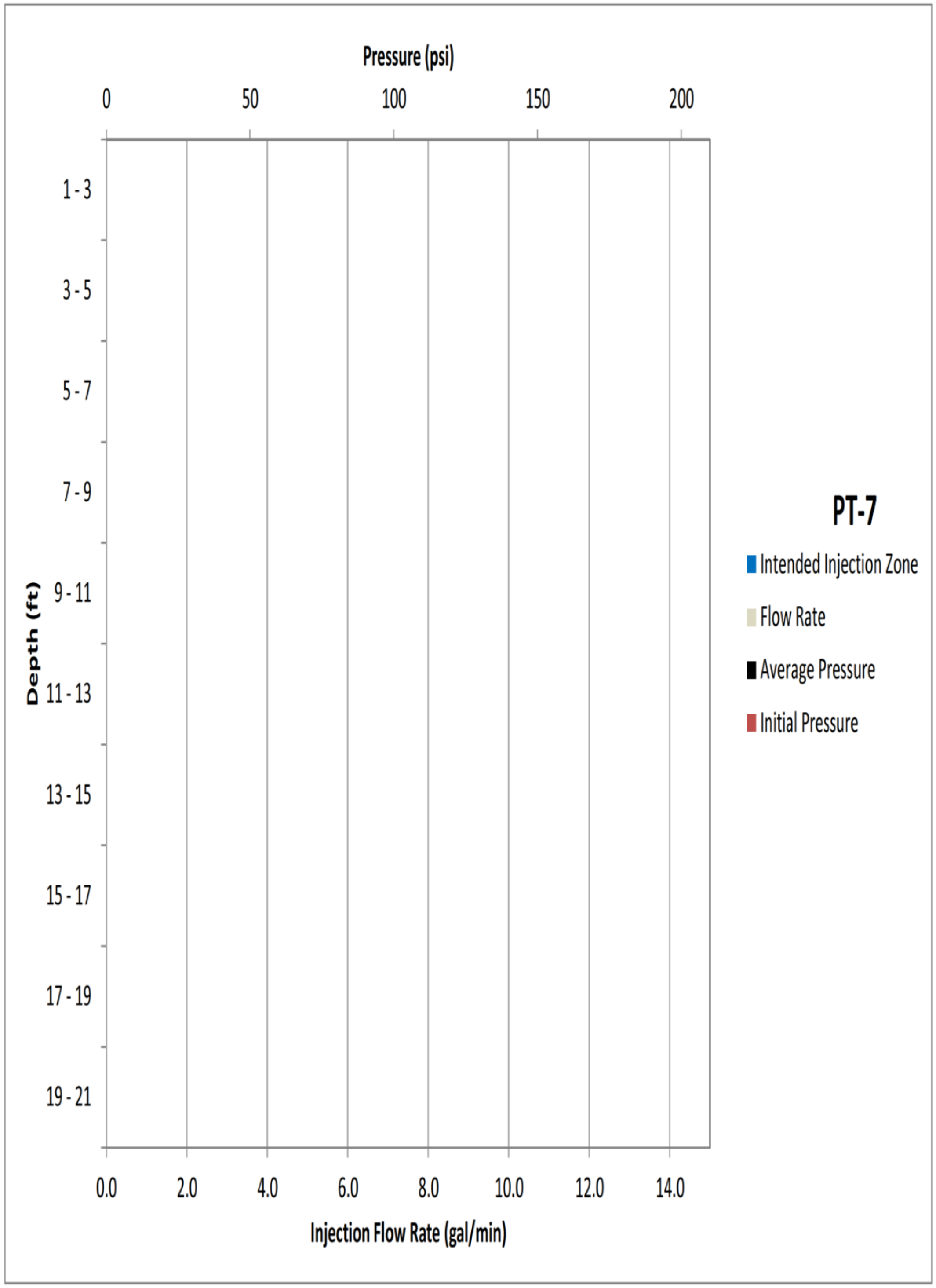
TITLE: **REAGENT INJECTION VOLUME INTO PT-7 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-7d**
PROJECT #	117-2201329	
DATE	5-9-14	





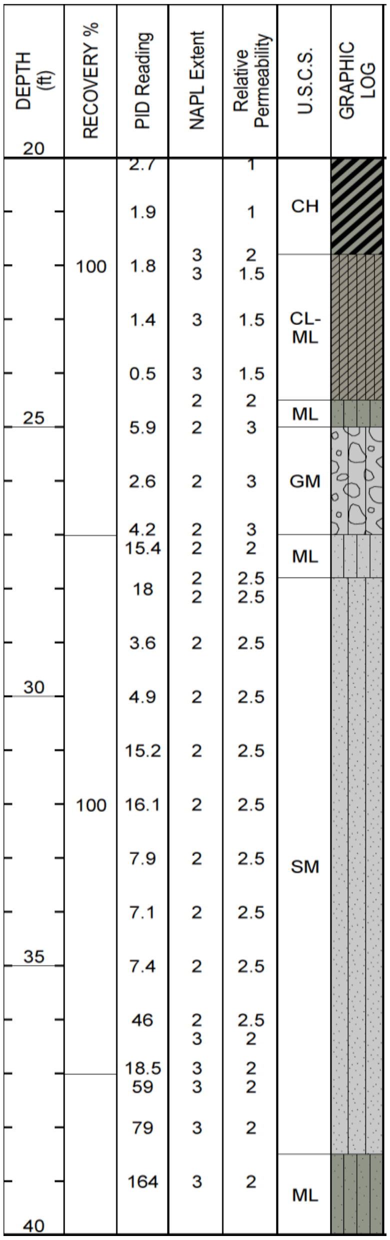
Note:
Borehole log on left is for adjacent TIP 440N/380E.

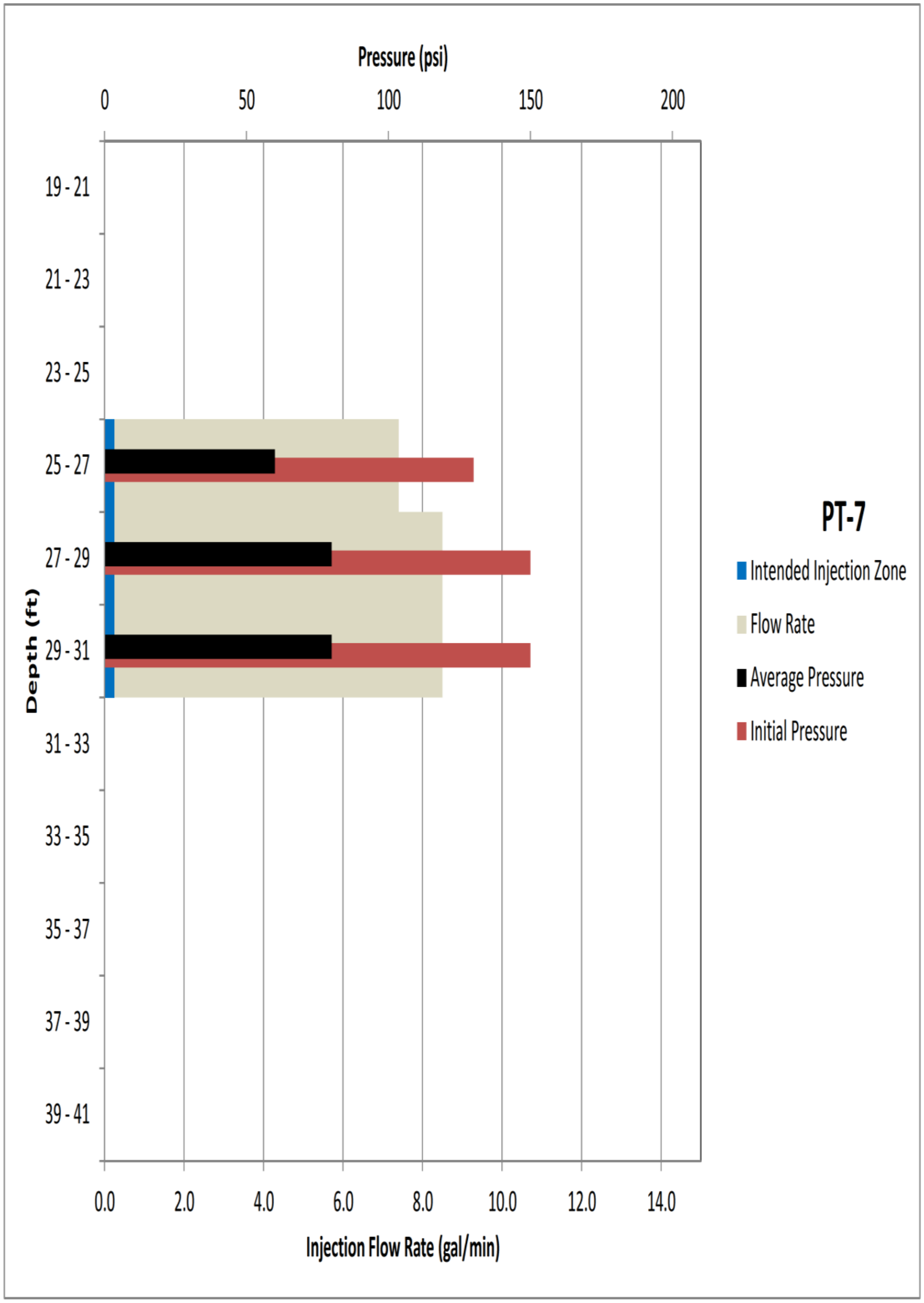
TITLE:
REAGENT FLOW RATE FOR PT-7
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-7e**
PROJECT #	117-2201329	
DATE	5-9-14	



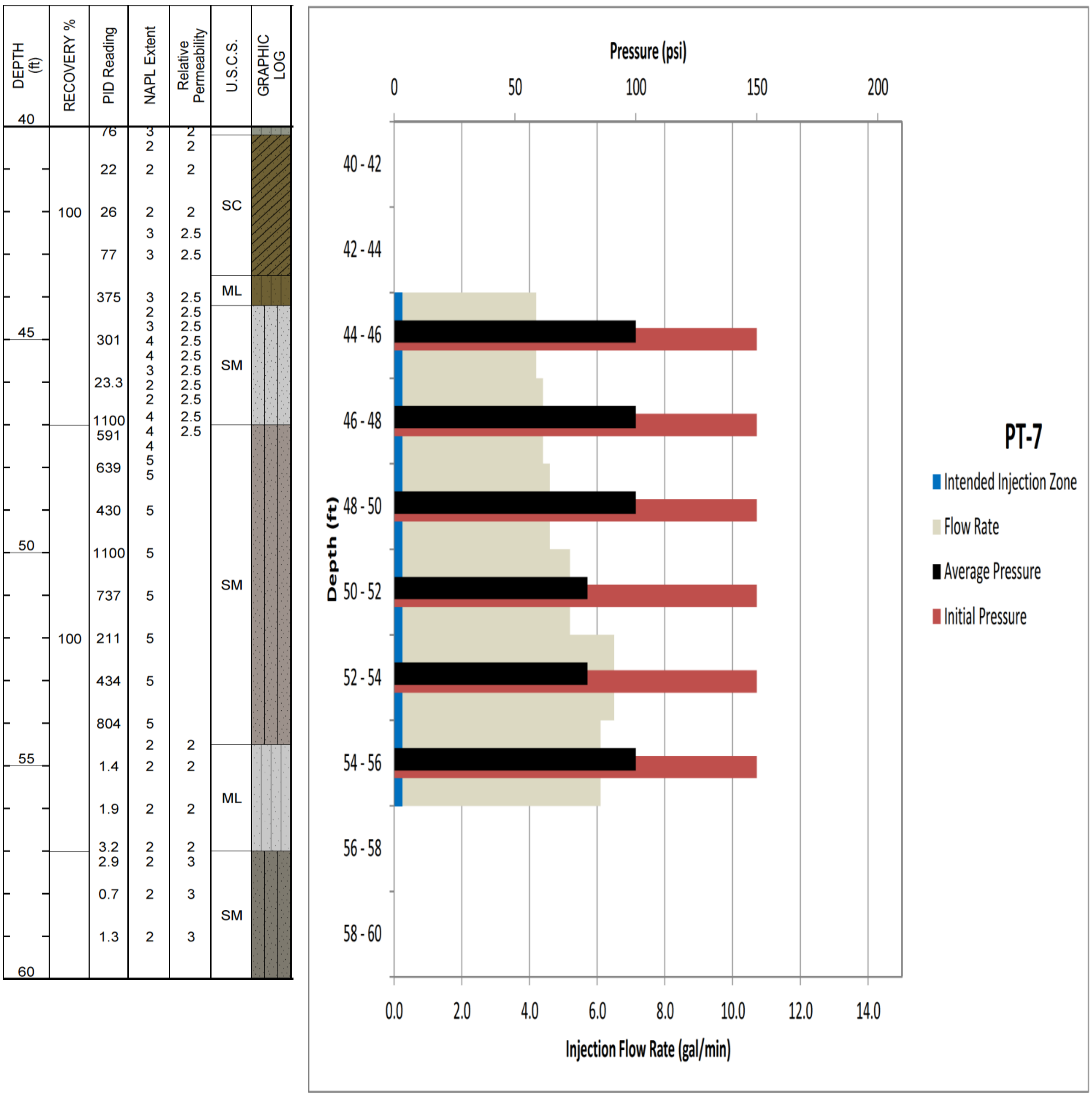


Note:
Borehole log on left is for adjacent TIP 440N/380E.

TITLE:	REAGENT FLOW RATE FOR PT-7 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	PT-7f
PROJECT #	117-2201329	
DATE	5-9-14	



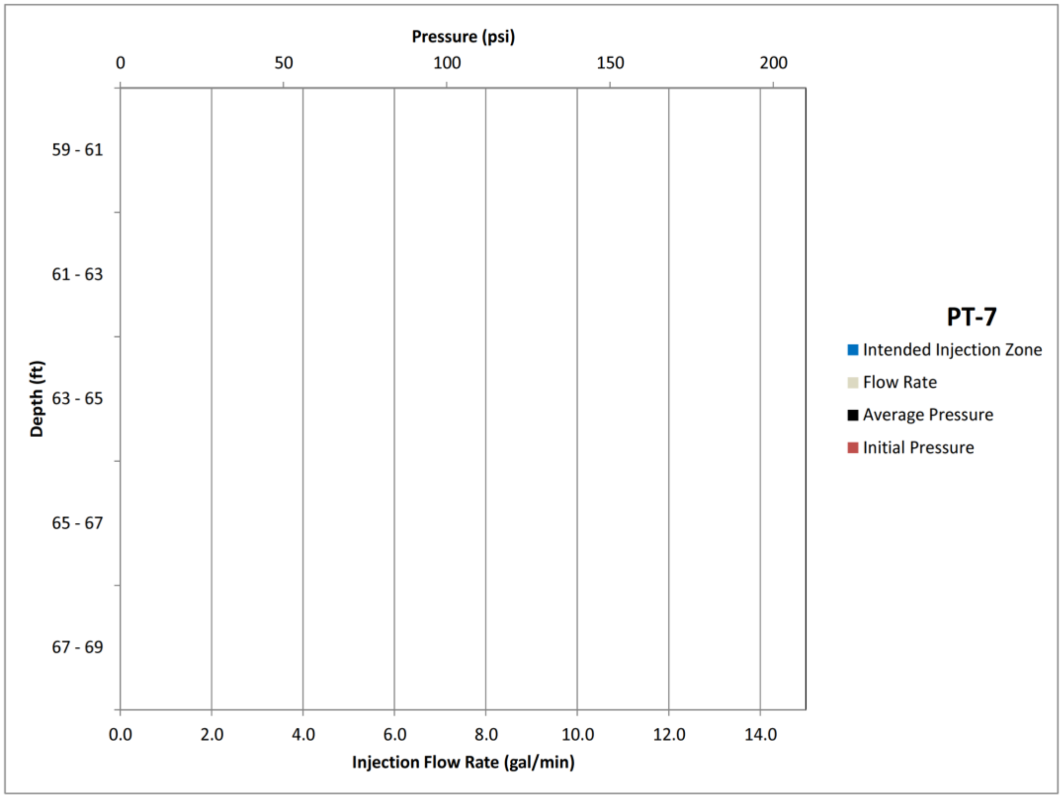
Note:
Borehole log on left is for adjacent TIP 440N/380E.

TITLE:	REAGENT FLOW RATE FOR PT-7 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	PT-7g
PROJECT #	117-2201329	
DATE	5-9-14	

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
60		1.8	2	3		
		0.6	1	3		
	100	0.3	1	3	SM	
		0.3	1	3		
		0	1	3		
65		0	1	3	SC-SM	
		0	1 1	1.5 1.5		
		0 0	1 1	1.5 1.5	CL-ML	
	100	0	1	1.5		
		0	1	1.5		



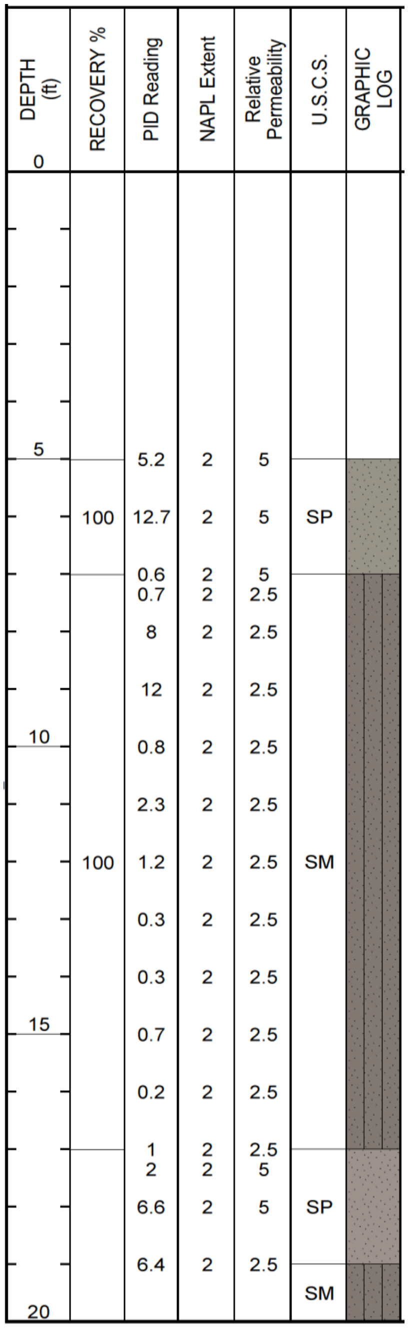
Note:
Borehole log on left is for adjacent TIP 440N/380E.

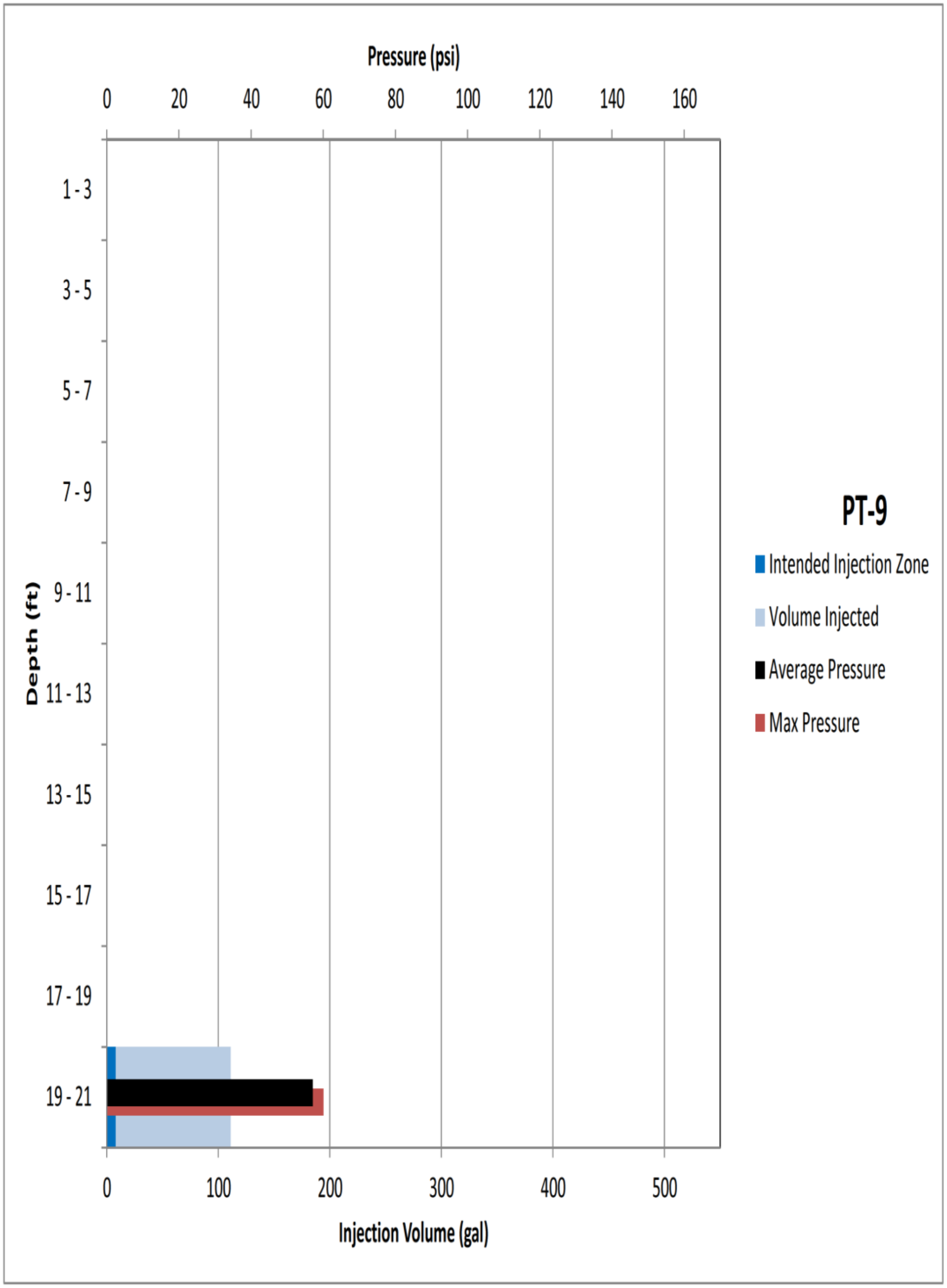
TITLE: **REAGENT FLOW RATE FOR PT-7 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-7h**
PROJECT #	117-2201329	
DATE	5-9-14	





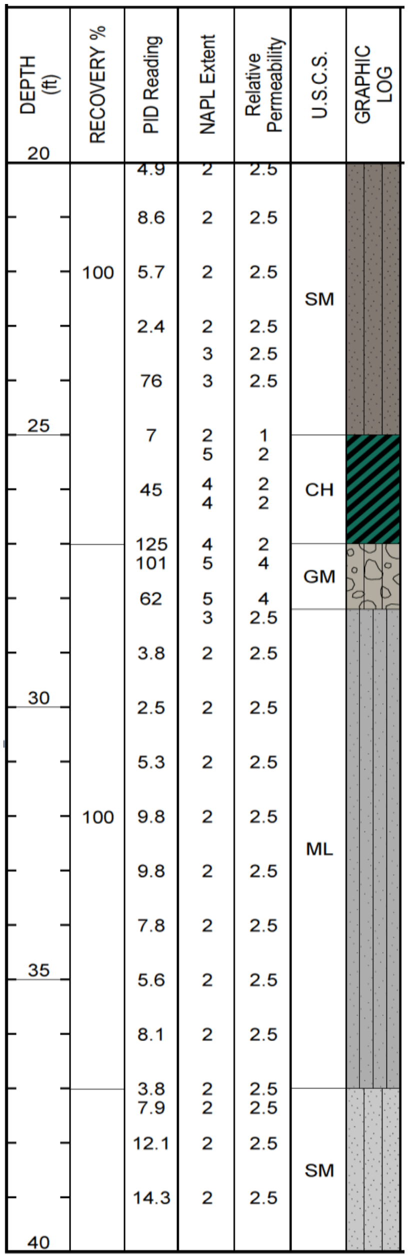
TITLE: **REAGENT VOLUME INJECTED INTO PT-9 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

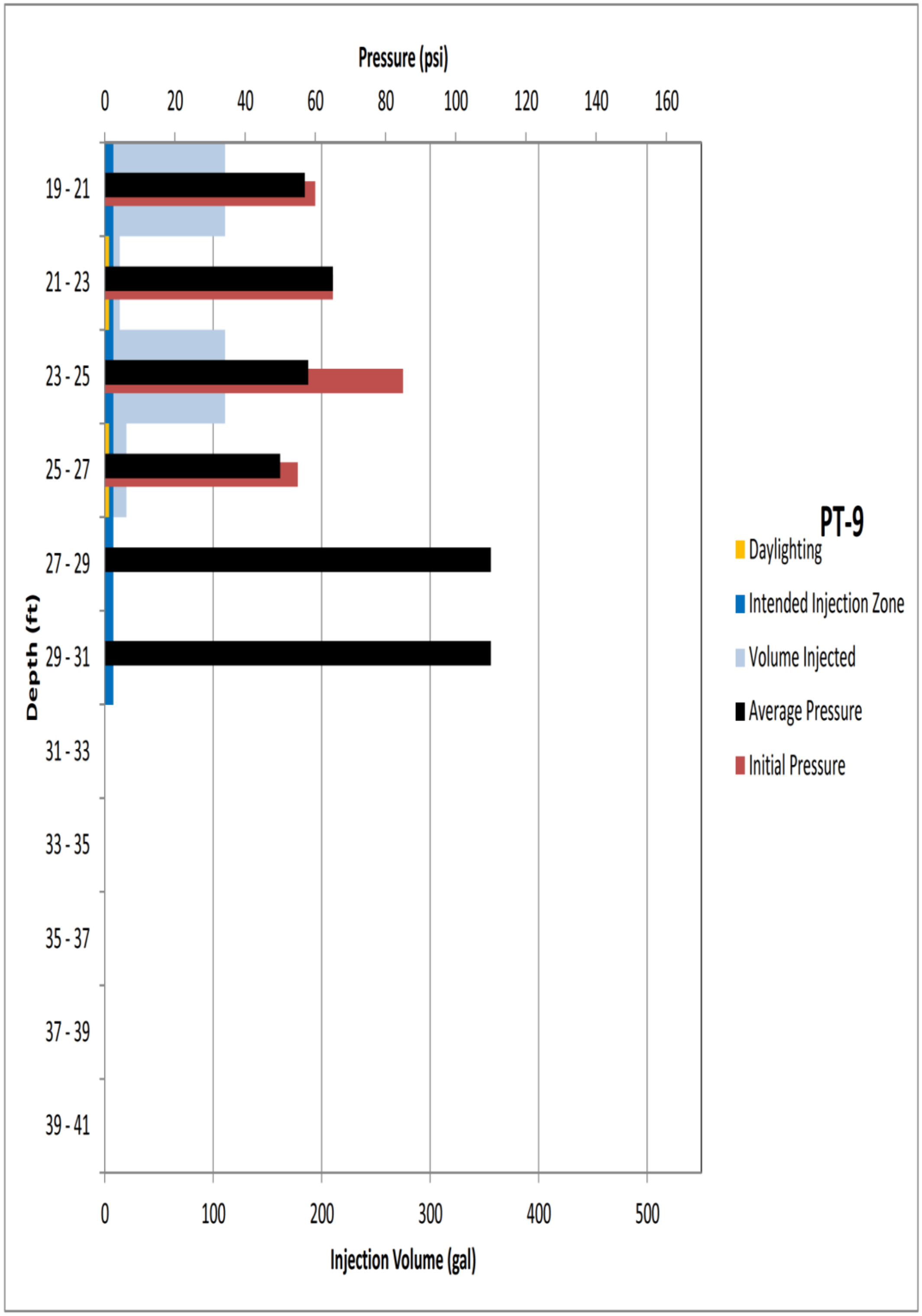
LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-9a**
PROJECT #	117-2201329	
DATE	4-21-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.





TITLE:

REAGENT VOLUME INJECTED INTO PT-9
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

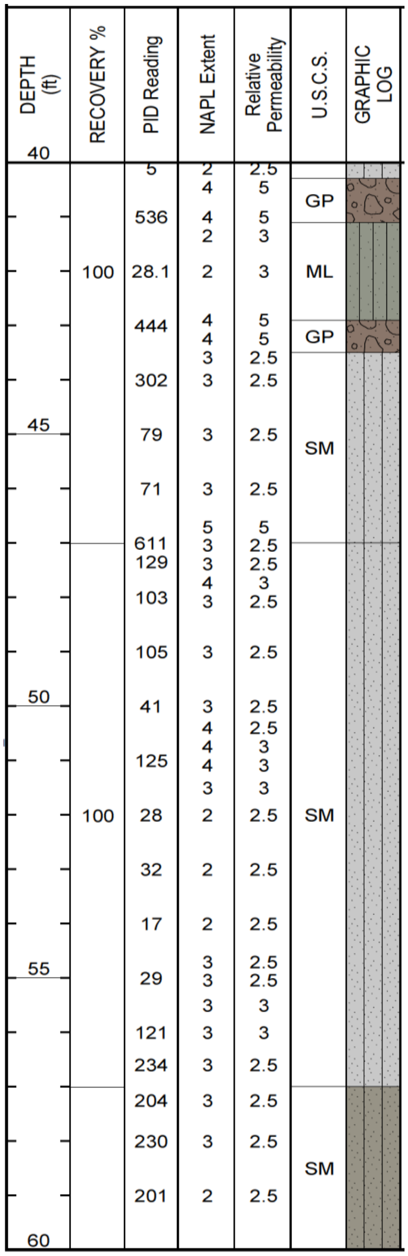
LOCATION:

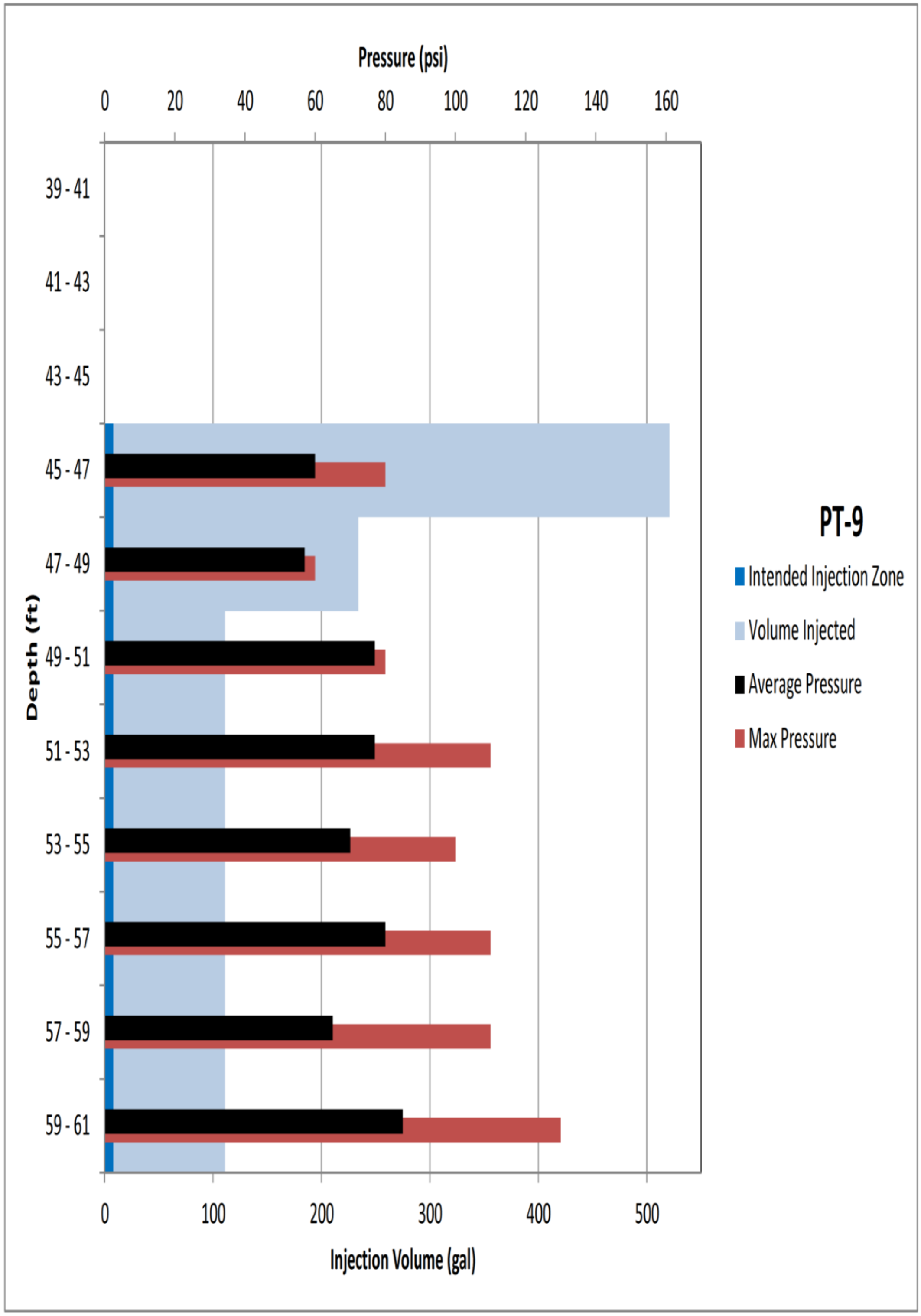
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-9b**
PROJECT #	117-2201329	
DATE	4-21-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.





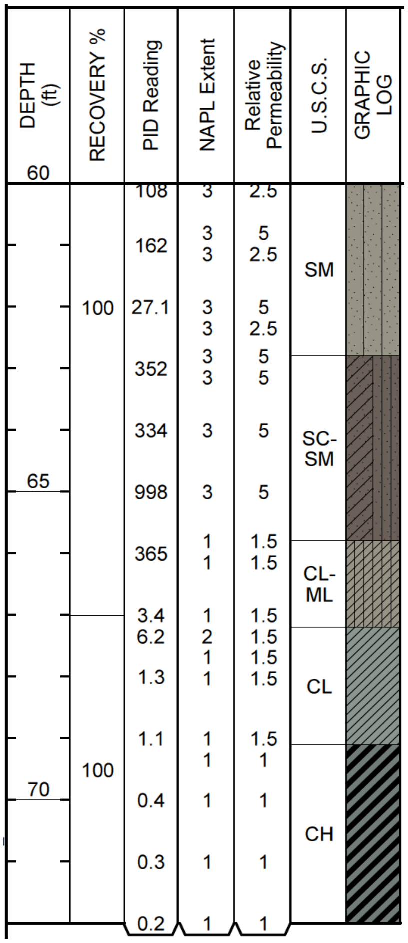
TITLE:
REAGENT VOLUME INJECTED INTO PT-9 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

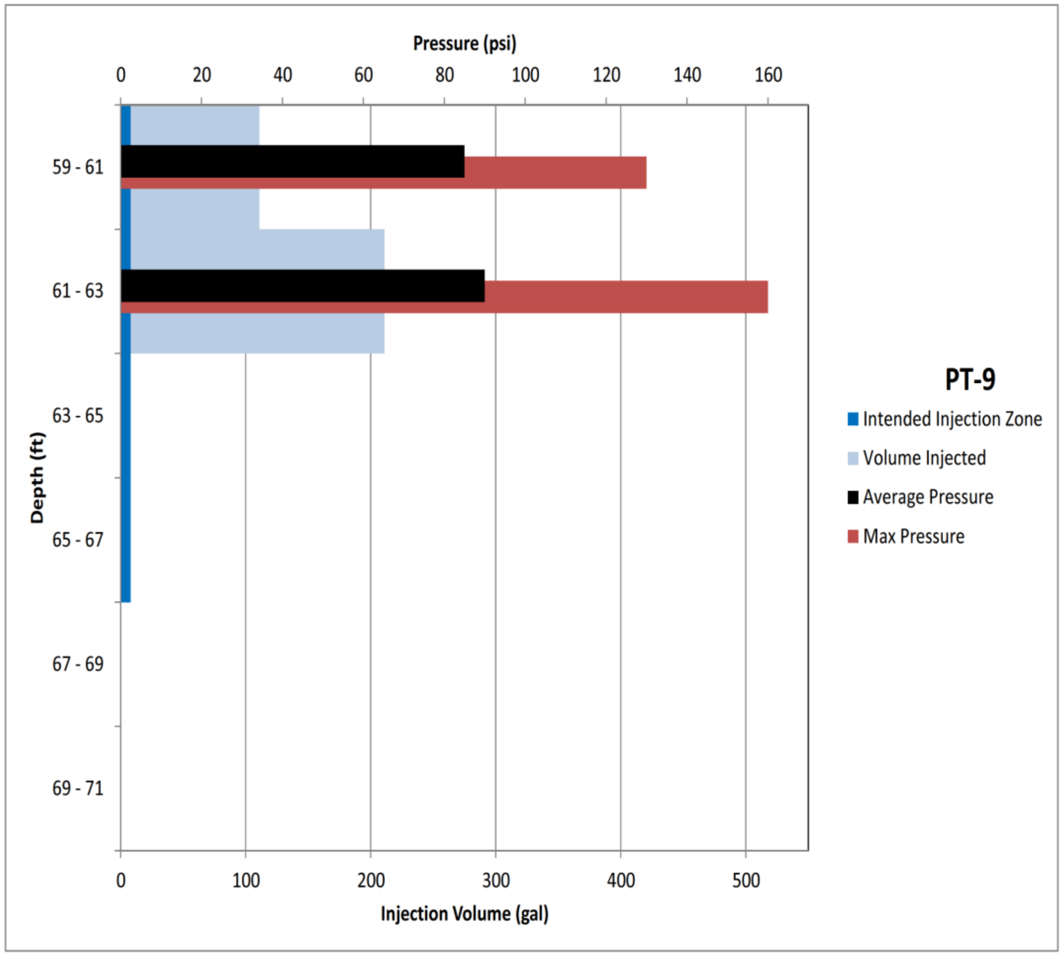
LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-9c**
PROJECT #	117-2201329	
DATE	4-21-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.





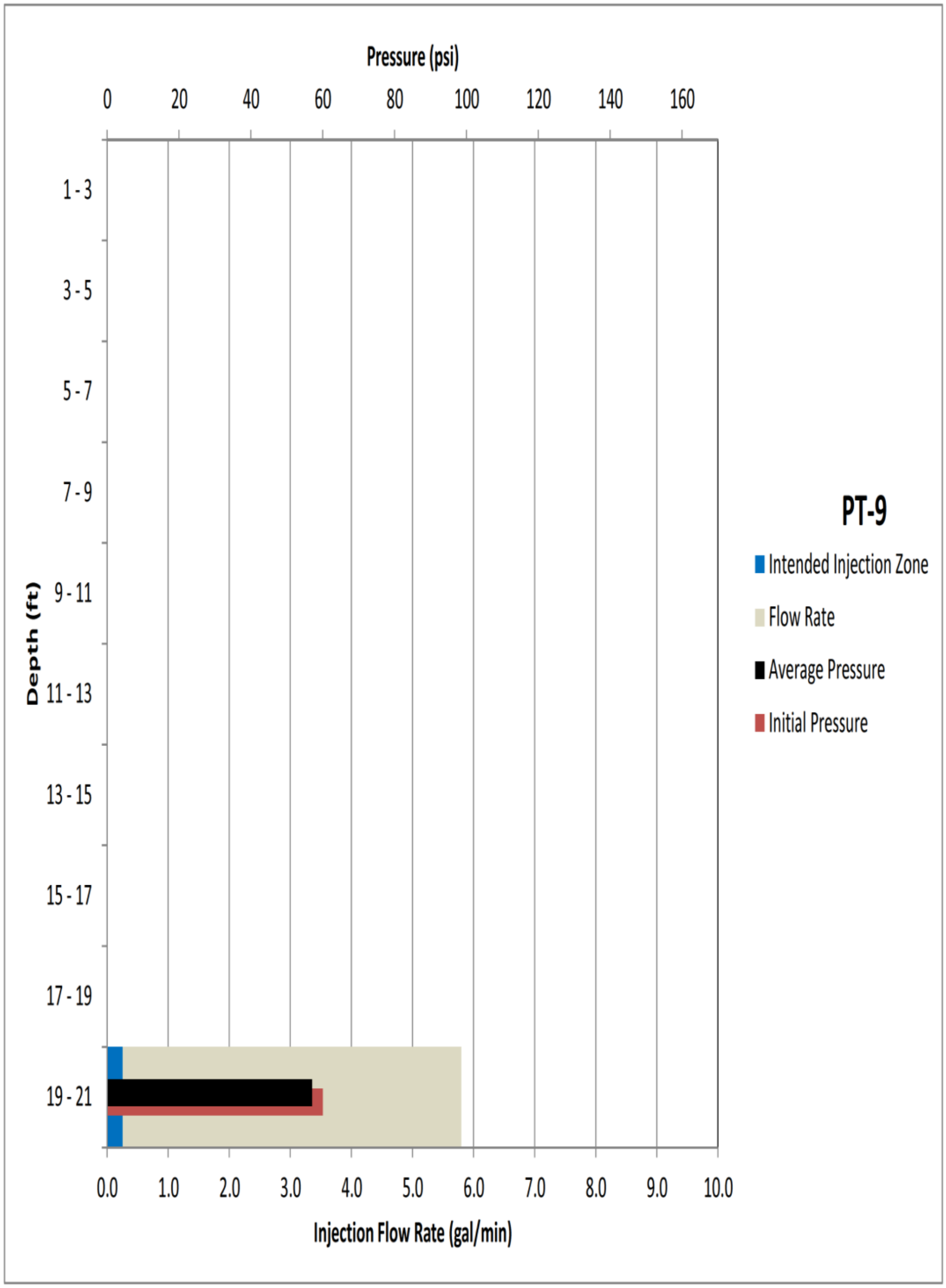
TITLE:	**REAGENT VOLUME INJECTED INTO PT-9 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**
LOCATION:	**Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-9d**
PROJECT #	117-2201329	
DATE	4-21-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
0						
5		5.2	2	5		
	100	12.7	2	5	SP	
		0.6 0.7	2 2	5 2.5		
		8	2	2.5		
		12	2	2.5		
10		0.8	2	2.5		
		2.3	2	2.5		
	100	1.2	2	2.5	SM	
		0.3	2	2.5		
		0.3	2	2.5		
15		0.7	2	2.5		
		0.2	2	2.5		
		1 2	2 2	2.5 5		
		6.6	2	5	SP	
		6.4	2	2.5		
20					SM	

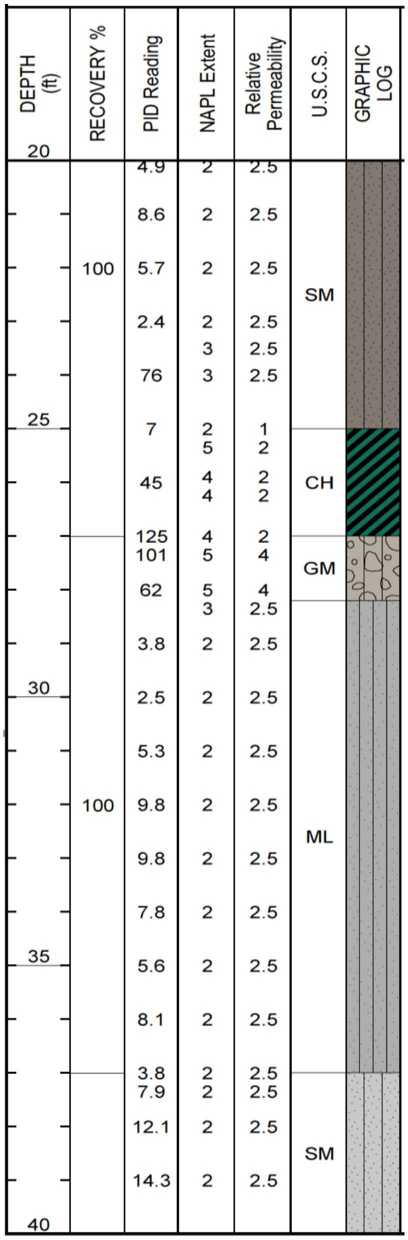


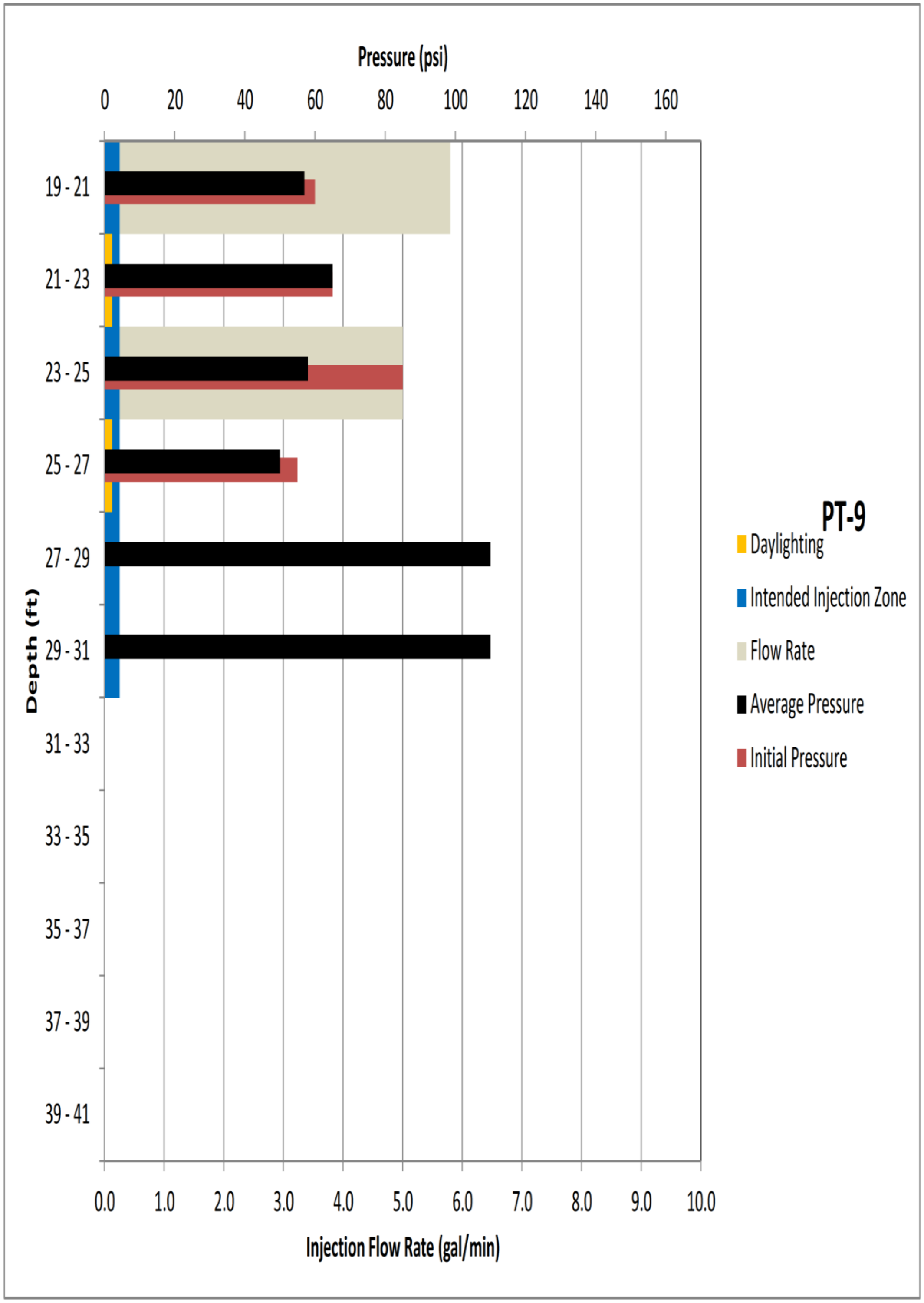
TITLE:	REAGENT FLOW RATE FOR PT-9 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	PT-9e
PROJECT #	117-2201329	
DATE	4-28-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.





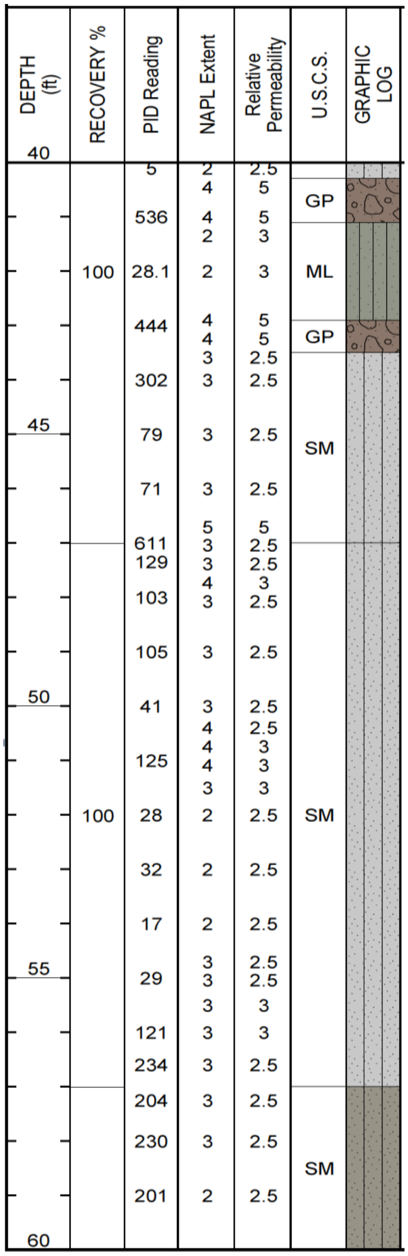
TITLE:
REAGENT FLOW RATE FOR PT-9
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

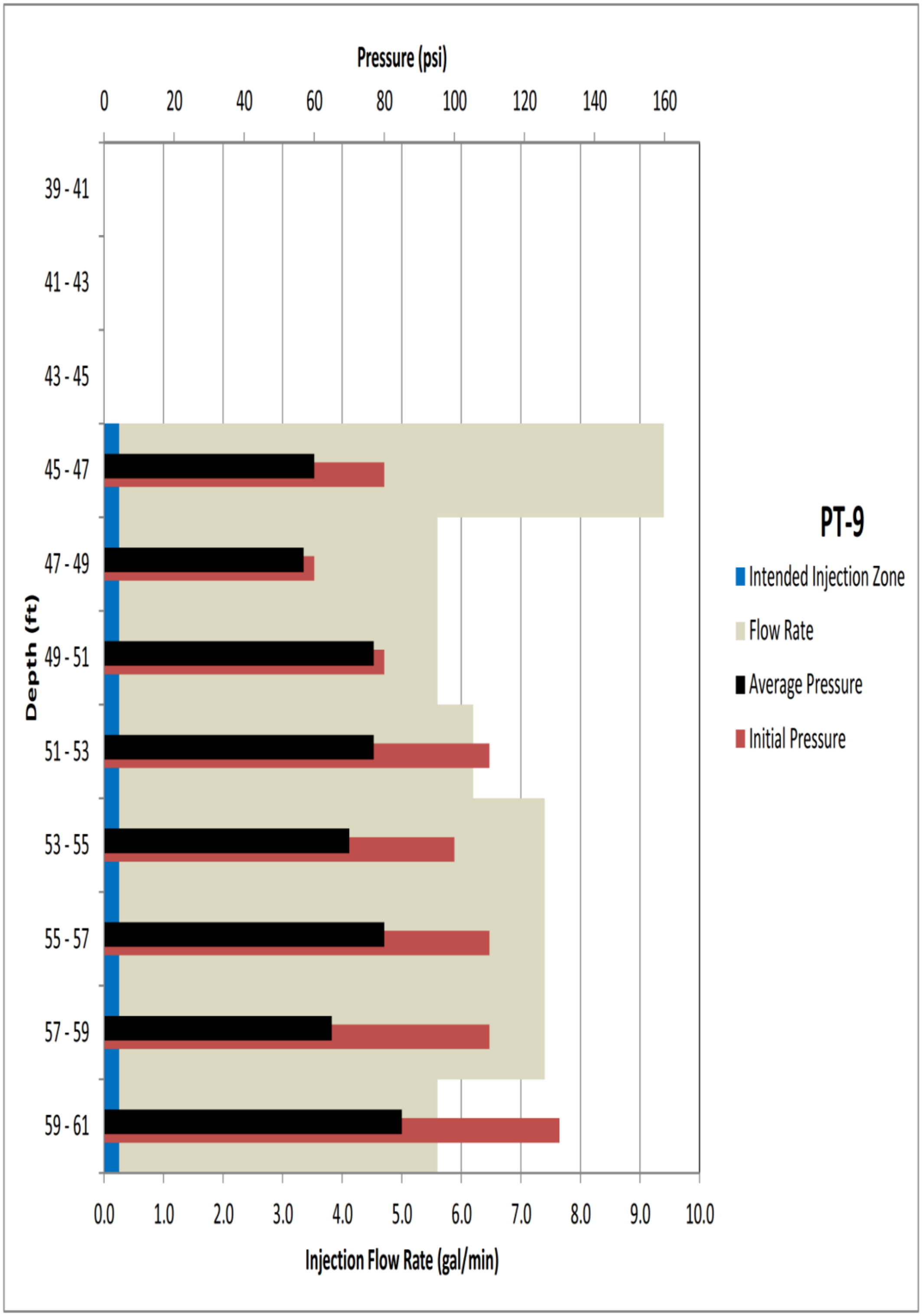
LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-9f**
PROJECT #	117-2201329	
DATE	4-28-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.





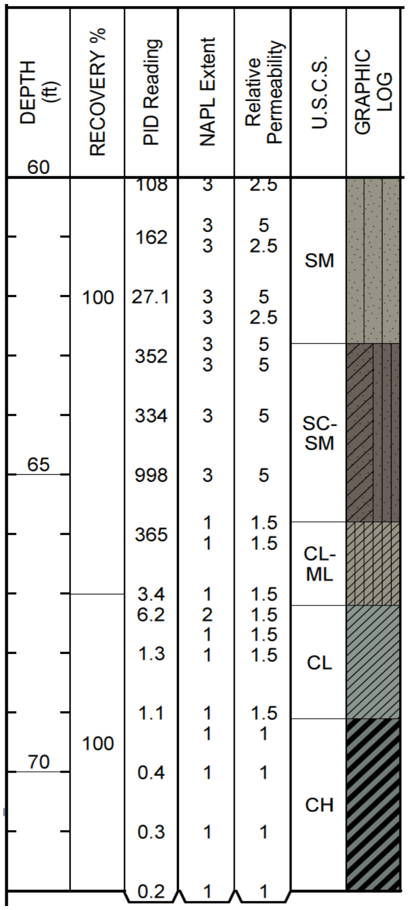
Note:
Borehole log on left is for adjacent TIP 420N/345E.

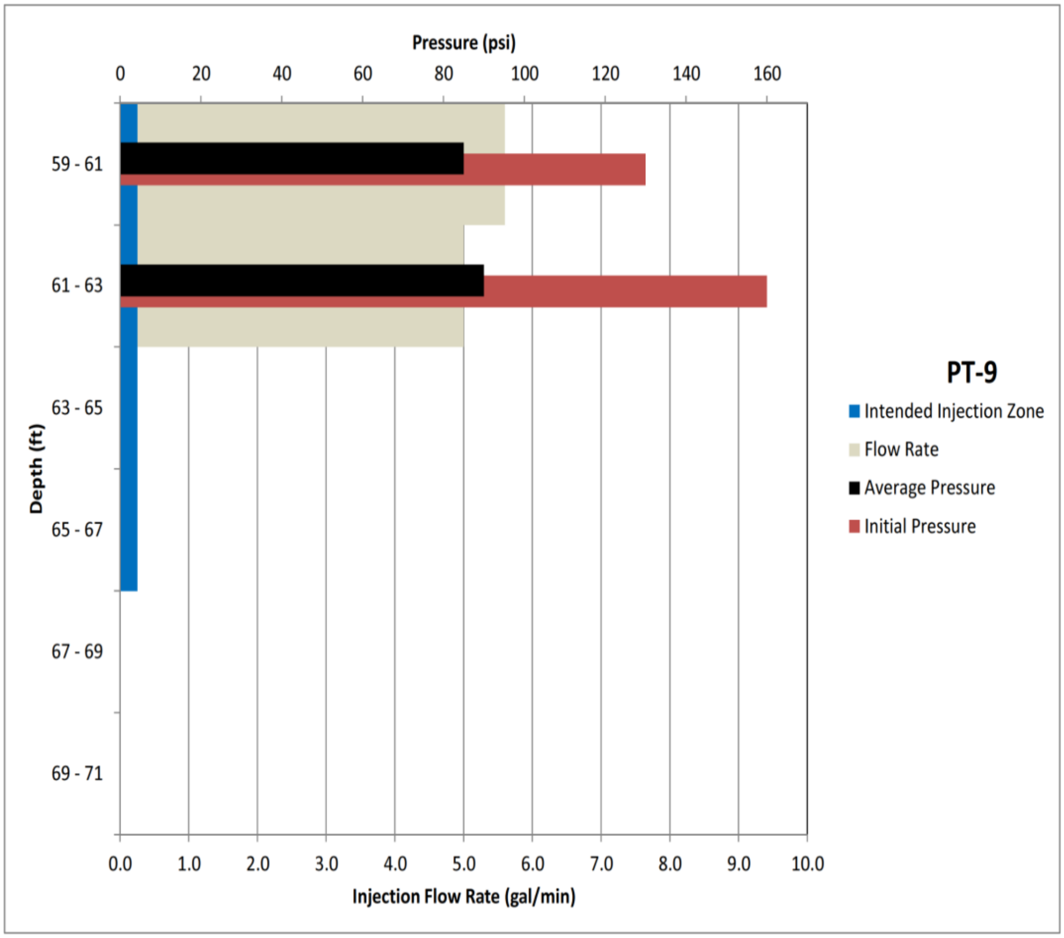
TITLE:
REAGENT FLOW RATE FOR PT-9
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-9g**
PROJECT #	117-2201329	
DATE	4-28-14	





Note:
Borehole log on left is for adjacent TIP 420N/345E.

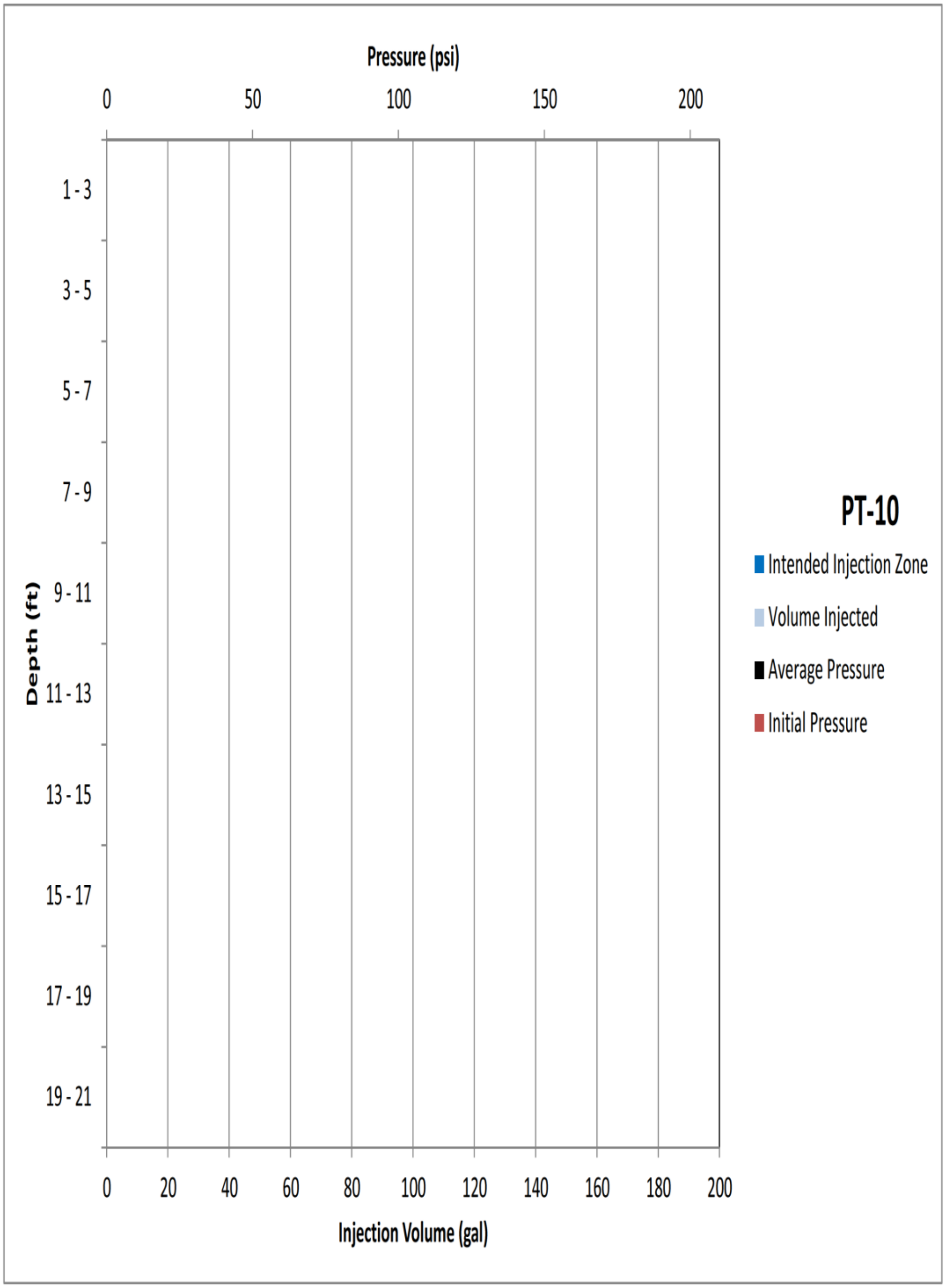
TITLE: **REAGENT FLOW RATE FOR PT-9 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-9h**
PROJECT #	117-2201329	
DATE	4-28-14	

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
0						
5		5.2	2	5		
	100	12.7	2	5	SP	
		0.6 0.7	2 2	5 2.5		
		8	2	2.5		
		12	2	2.5		
10		0.8	2	2.5		
		2.3	2	2.5		
	100	1.2	2	2.5	SM	
		0.3	2	2.5		
		0.3	2	2.5		
15		0.7	2	2.5		
		0.2	2	2.5		
		1 2	2 2	2.5 5		
		6.6	2	5	SP	
		6.4	2	2.5		
20					SM	



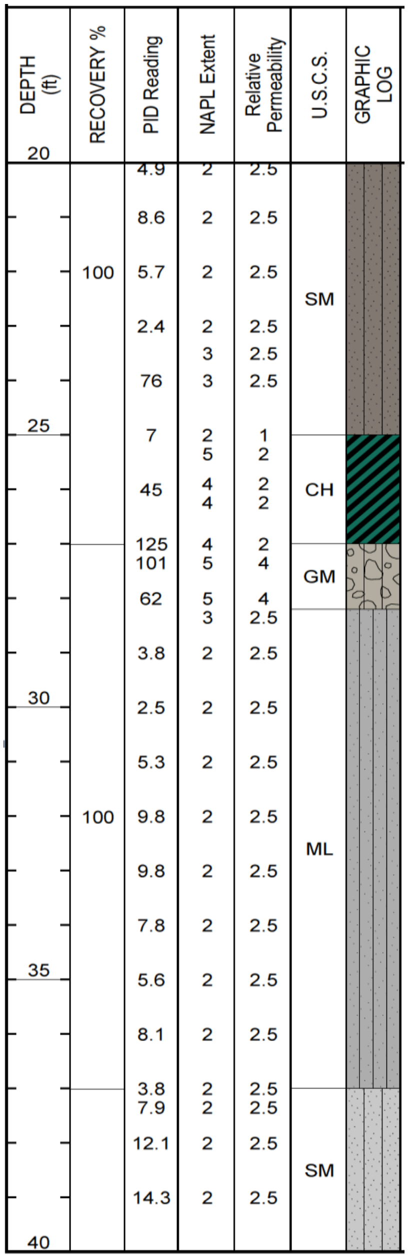
Note:
Borehole log on left is for adjacent TIP 420N/345E.

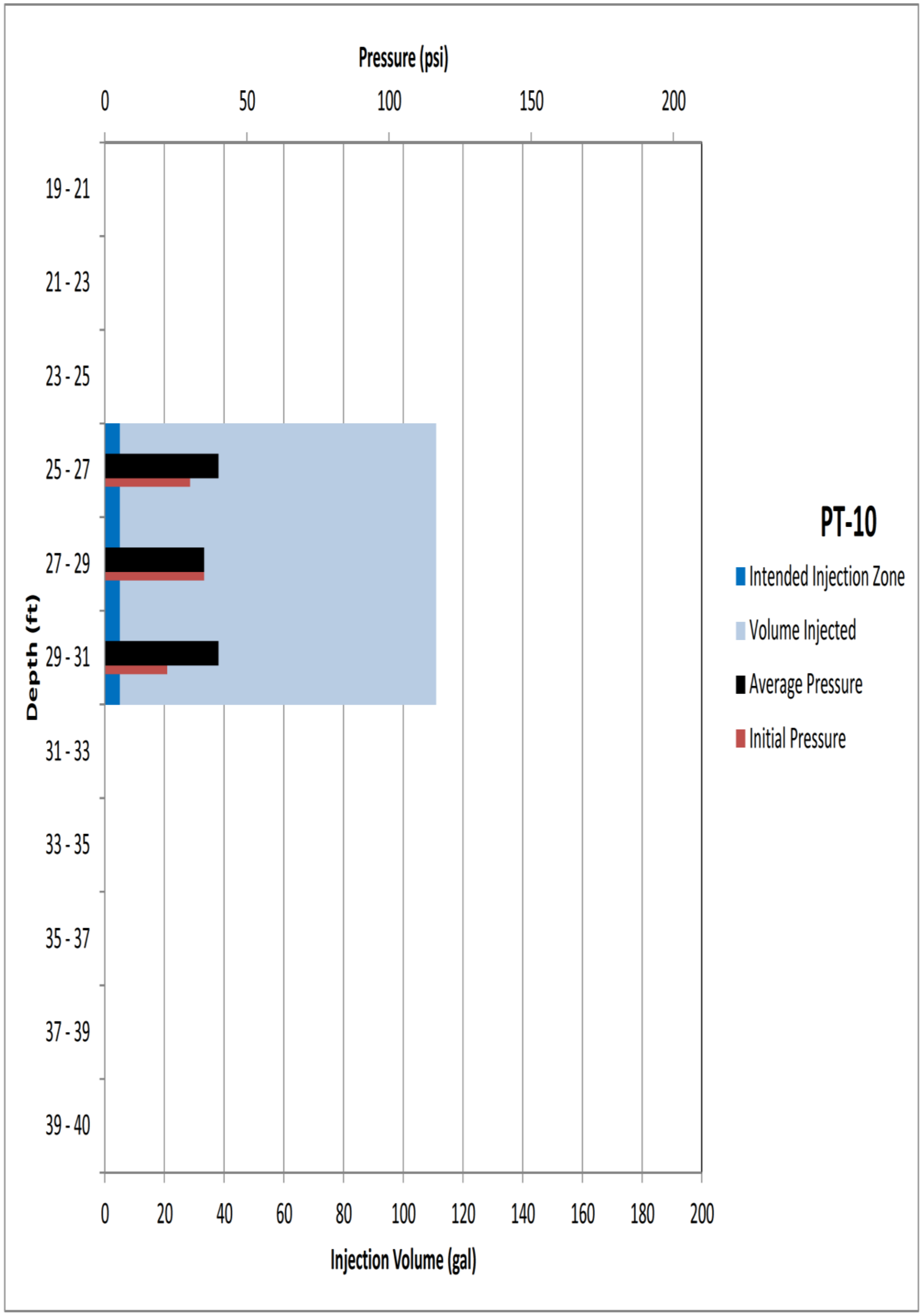
TITLE:
REAGENT VOLUME INJECTED INTO PT-10
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT10a**
PROJECT #	117-2201329	
DATE	4-21-14	





TITLE:

REAGENT VOLUME INJECTED INTO PT-10
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

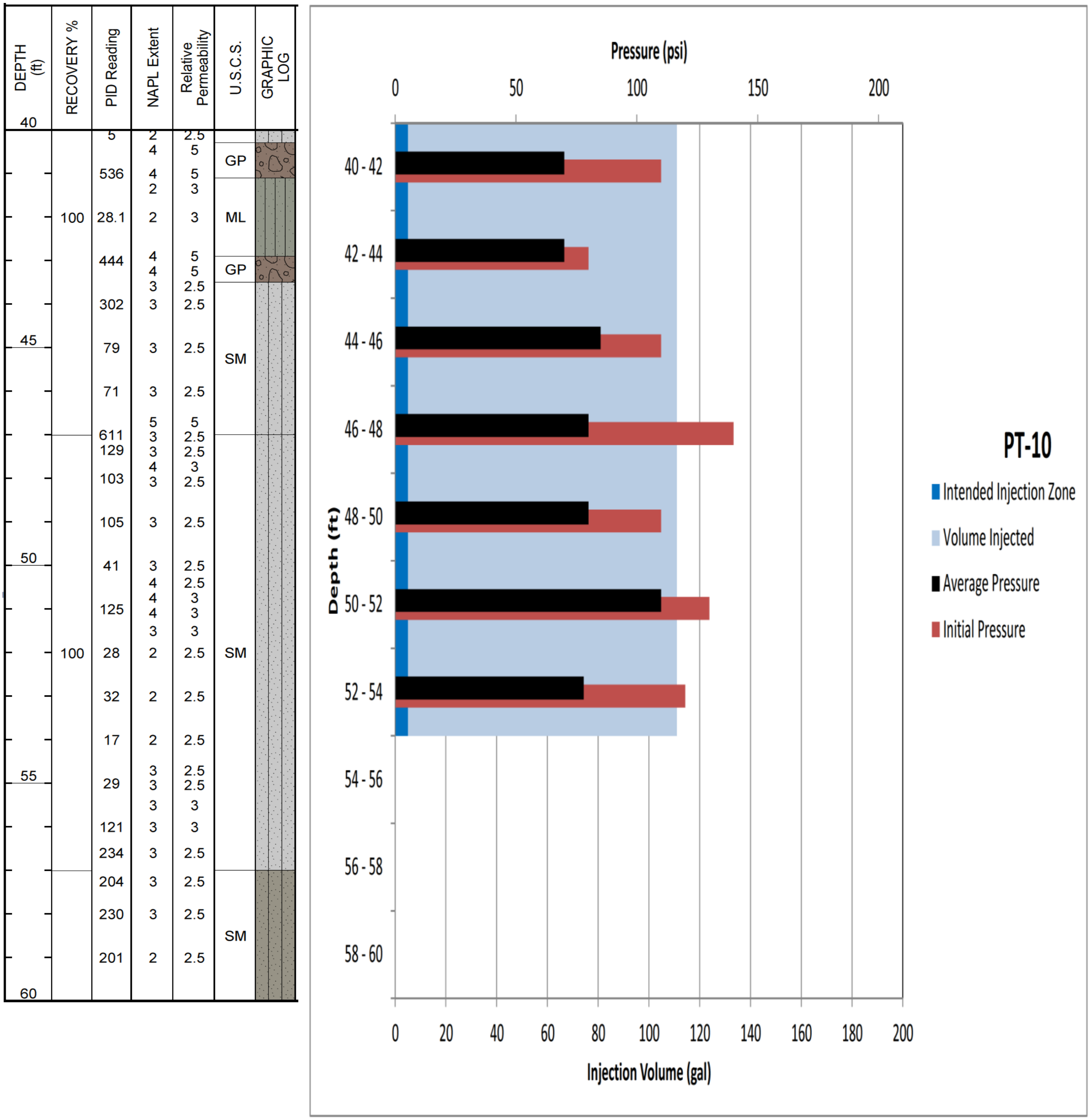
LOCATION:

Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-10b**
PROJECT #	117-2201329	
DATE	4-21-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.



TITLE: **REAGENT VOLUME INJECTED INTO PT-10 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

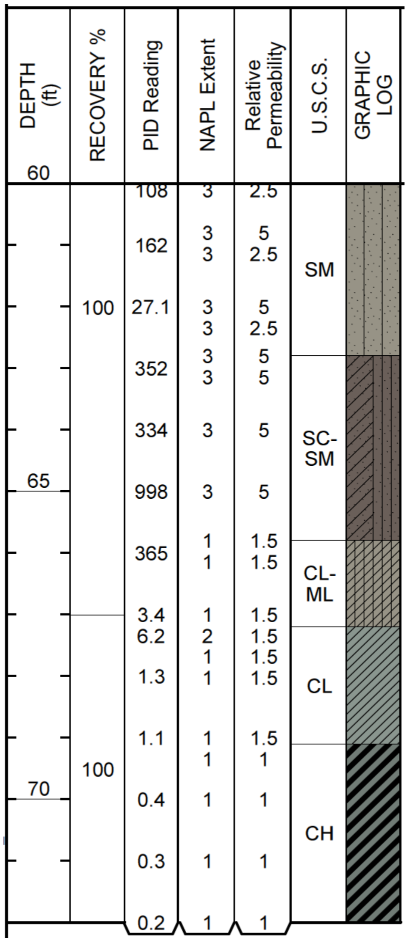
LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

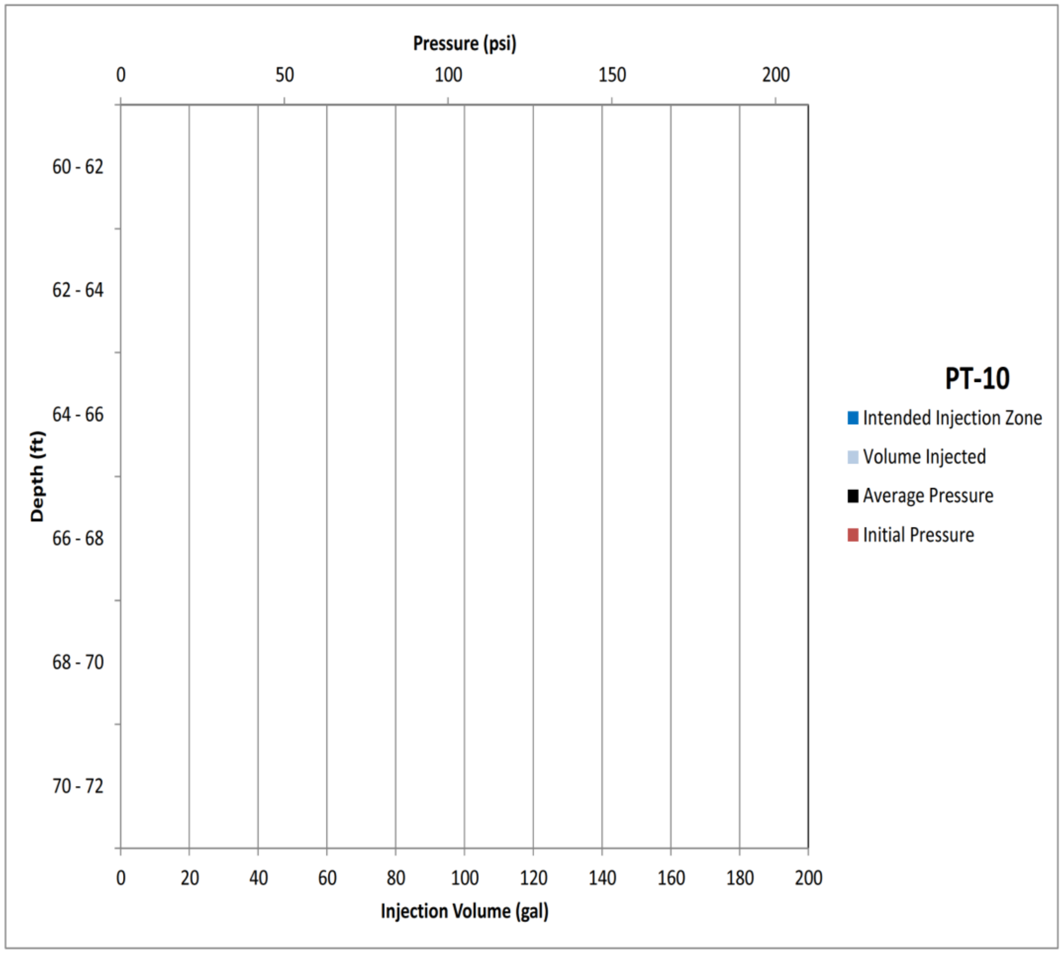
TETRA TECH

APPROVED	JE
DRAFTED	LD
PROJECT #	117-2201329
DATE	4-21-14

FIGURE **PT-10c**

Note:
Borehole log on left is for adjacent TIP 420N/345E.



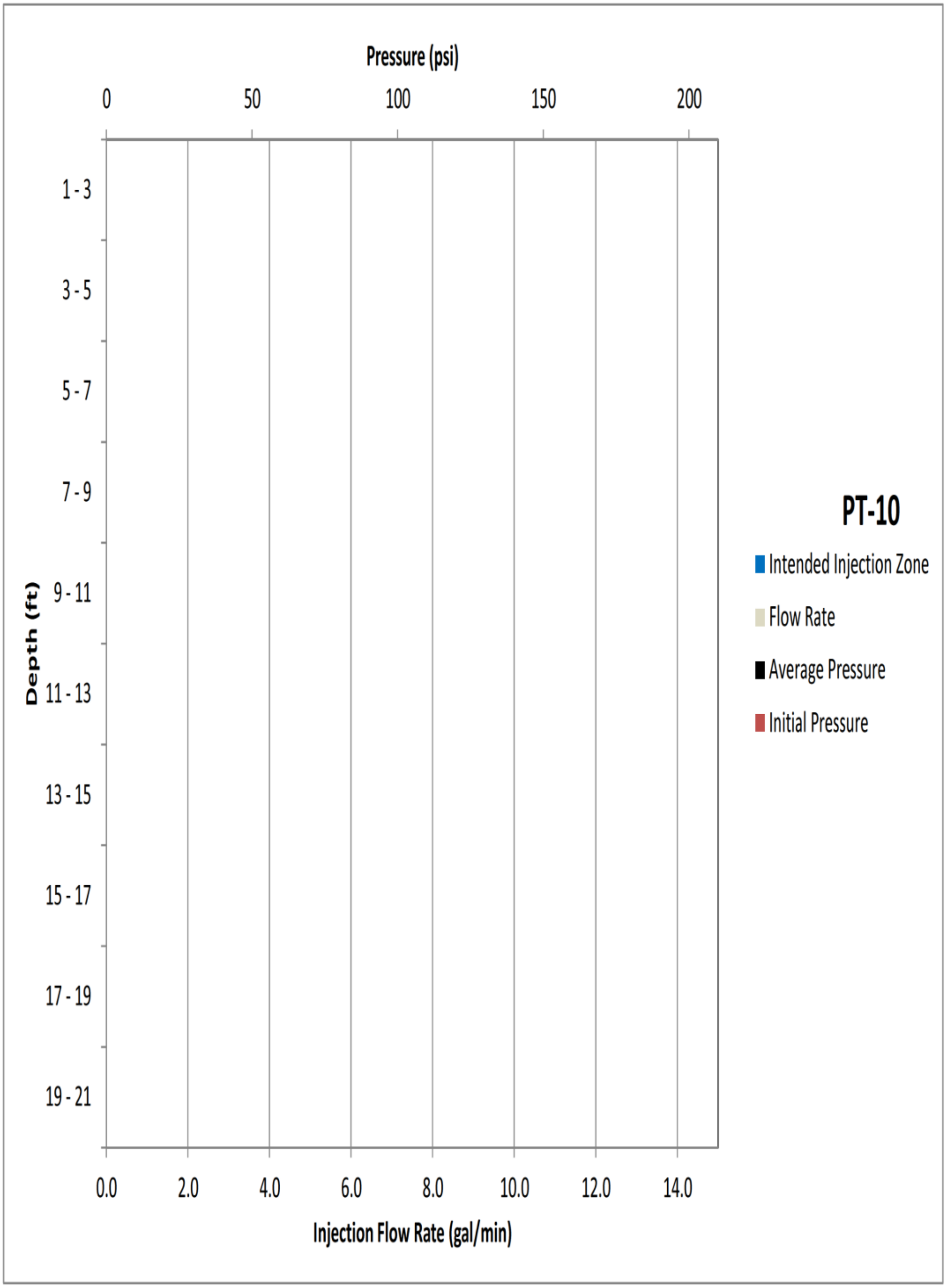


Note:
Borehole log on left is for adjacent TIP 420N/345E.

TITLE:	**REAGENT VOLUME INJECTED INTO PT-10 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**
LOCATION:	**Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	LD	**PT-10d**
	PROJECT #	117-2201329	
	DATE	4-21-14	

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
0						
5		5.2	2	5		
	100	12.7	2	5	SP	
		0.6 0.7	2 2	5 2.5		
		8	2	2.5		
		12	2	2.5		
10		0.8	2	2.5		
		2.3	2	2.5		
	100	1.2	2	2.5	SM	
		0.3	2	2.5		
		0.3	2	2.5		
15		0.7	2	2.5		
		0.2	2	2.5		
		1 2	2 2	2.5 5		
		6.6	2	5	SP	
		6.4	2	2.5		
					SM	
20						



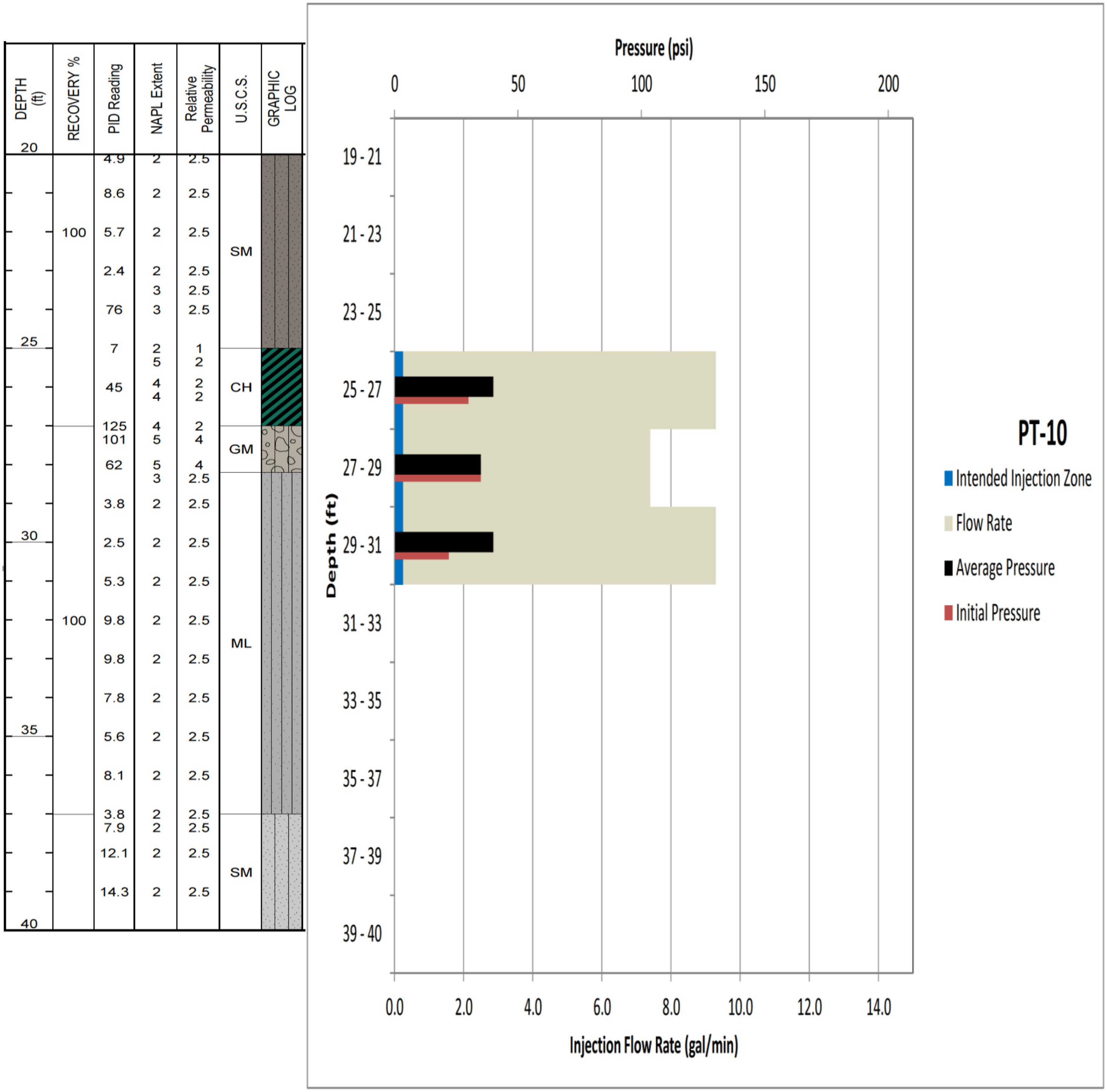
Note:
Borehole log on left is for adjacent TIP 420N/345E.

TITLE:
REAGENT FLOW RATE FOR PT-10
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-10e**
PROJECT #	117-2201329	
DATE	4-28-14	



TITLE:

REAGENT FLOW RATE FOR PT-10
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

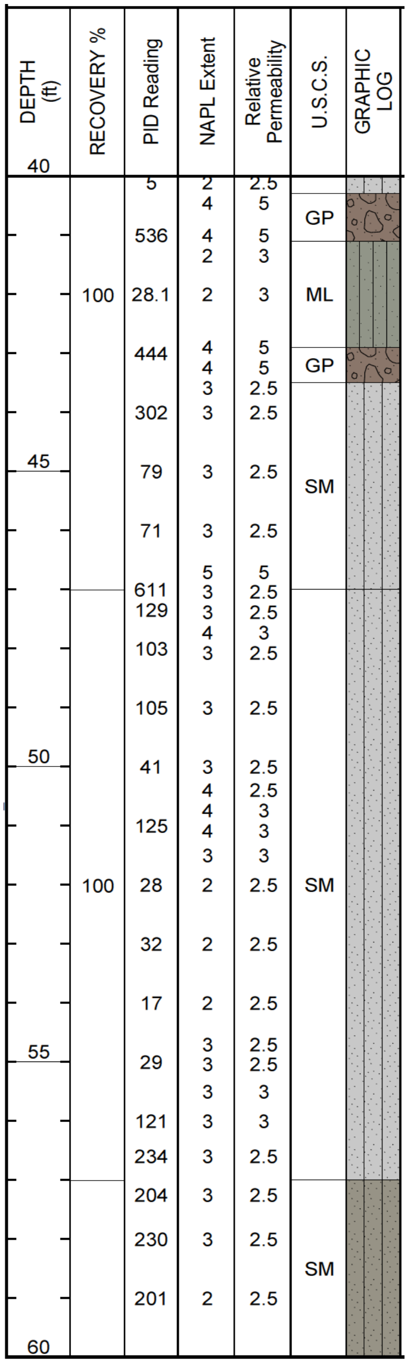
LOCATION:

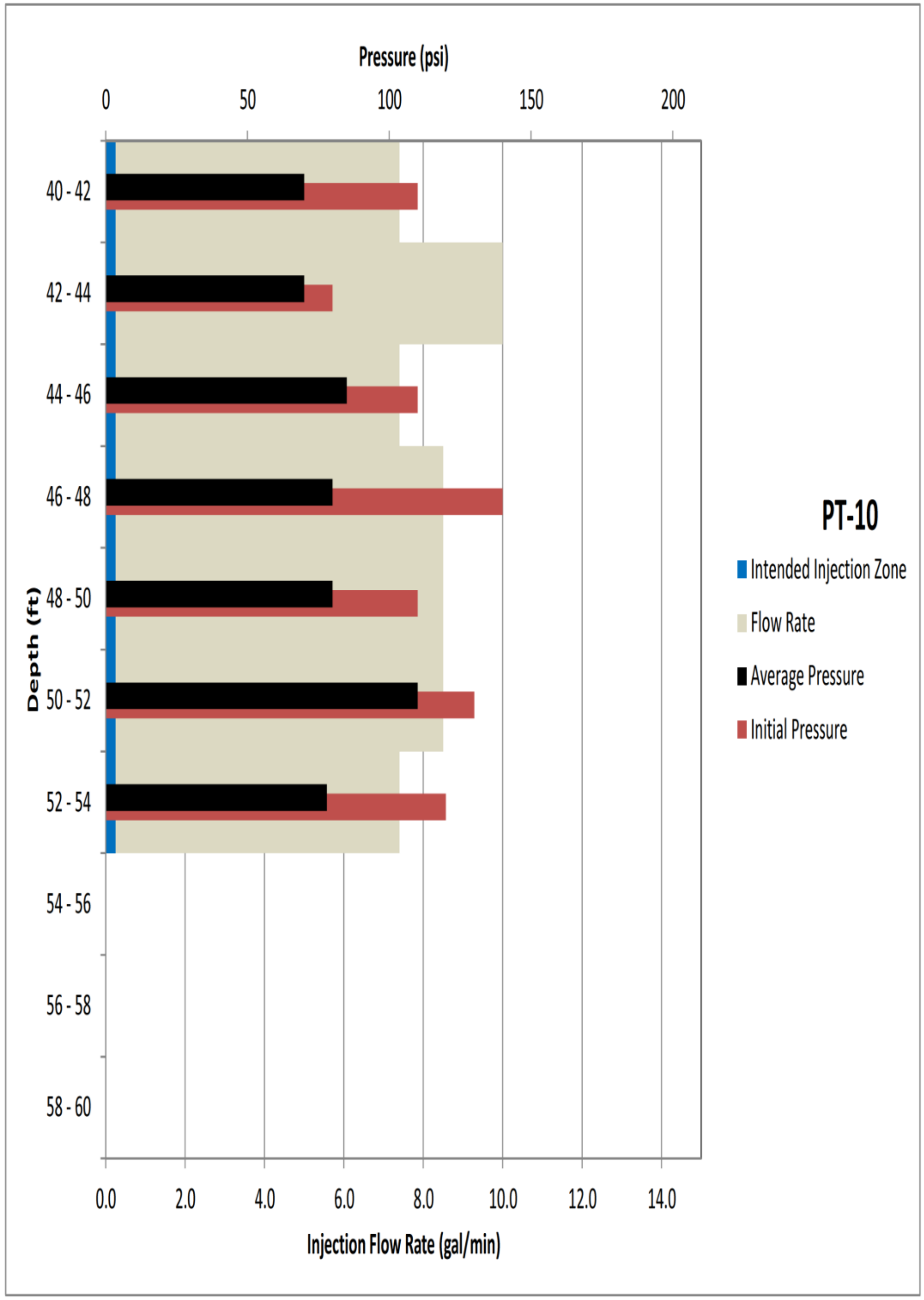
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-10f**
PROJECT #	117-2201329	
DATE	4-28-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.





TITLE:

REAGENT FLOW RATE FOR PT-10
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

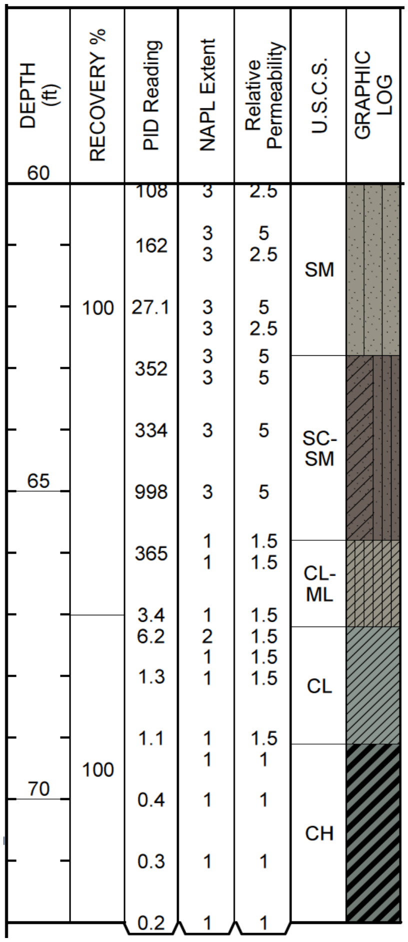
LOCATION:

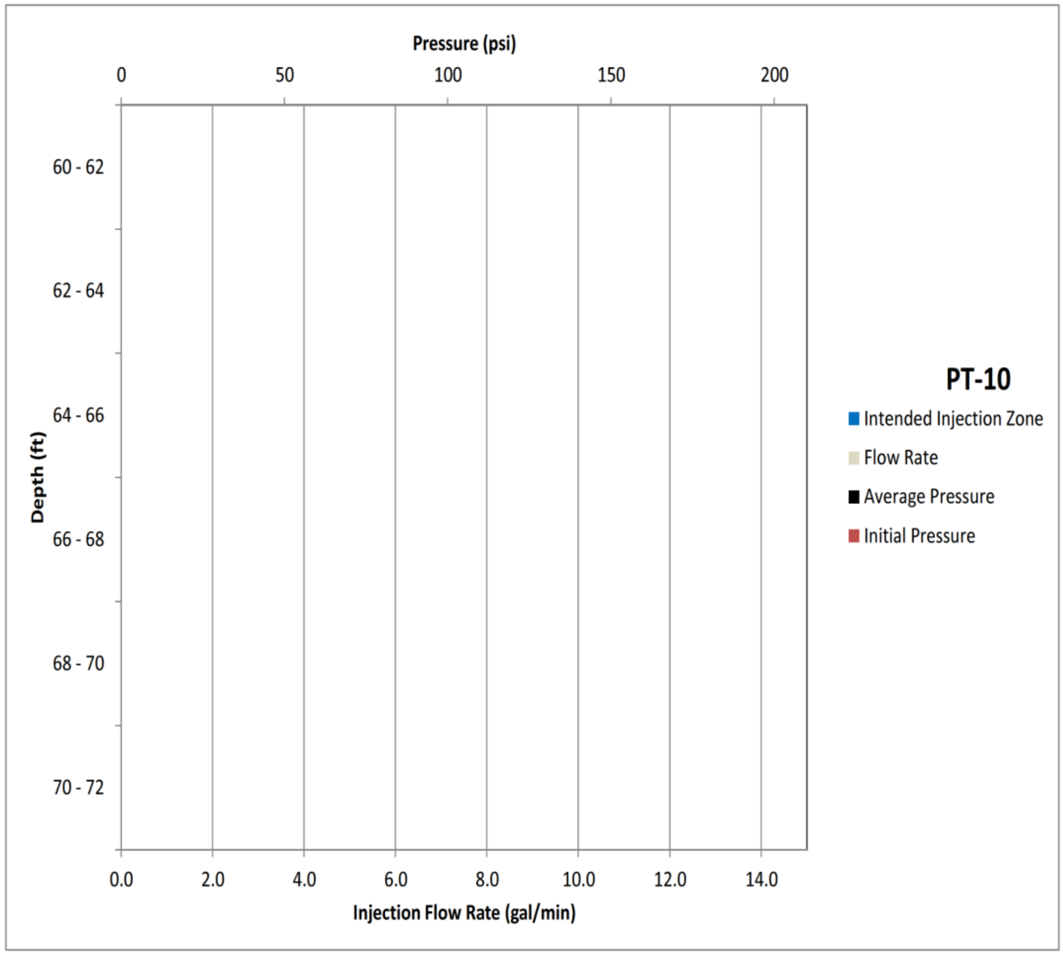
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-10g**
PROJECT #	117-2201329	
DATE	4-28-14	

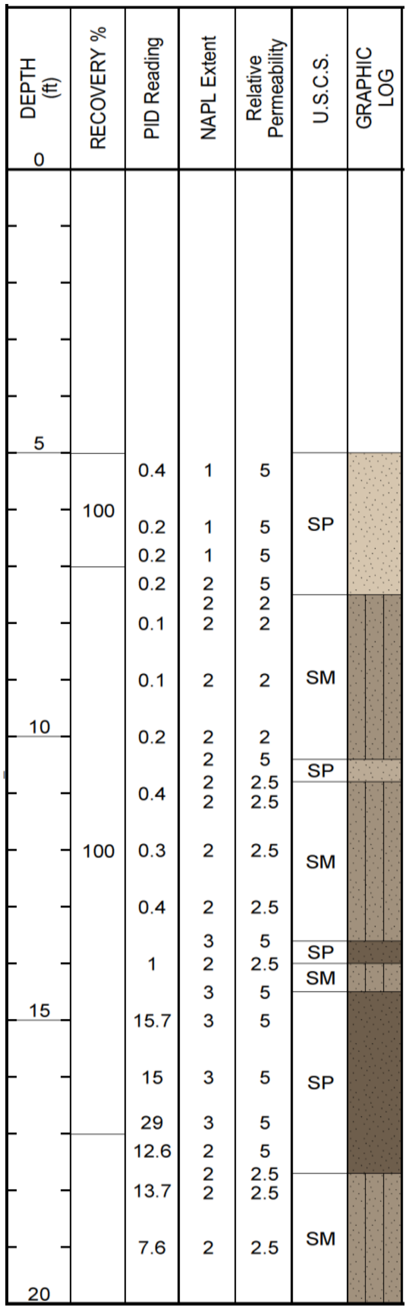
Note:
Borehole log on left is for adjacent TIP 420N/345E.

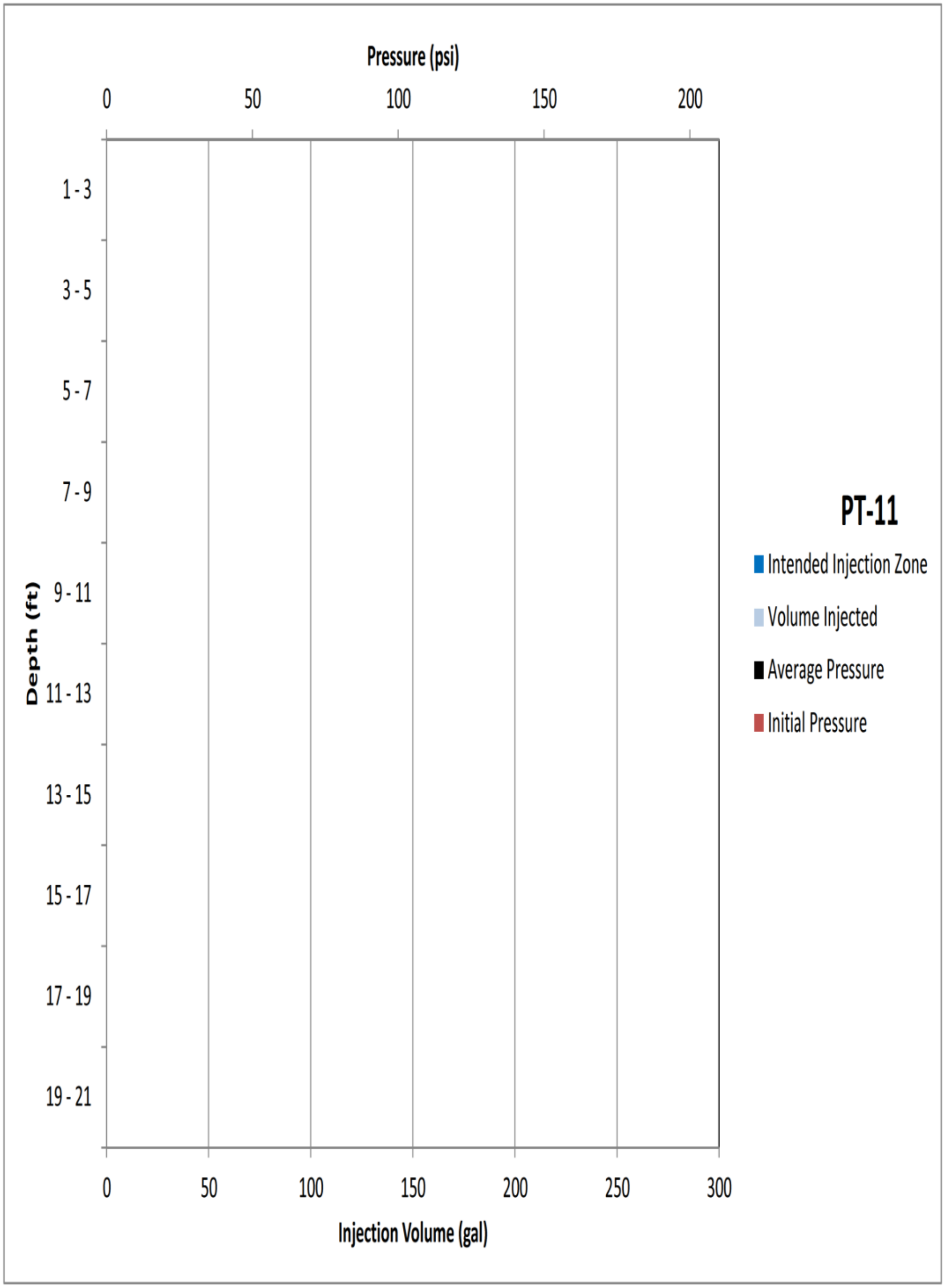




Note:
Borehole log on left is for adjacent TIP 420N/345E.

TITLE:	REAGENT FLOW RATE FOR PT-10 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES			
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida			
TETRA TECH		APPROVED	JE	FIGURE
		DRAFTED	LD	PT-10h
		PROJECT #	117-2201329	
		DATE	4-28-14	





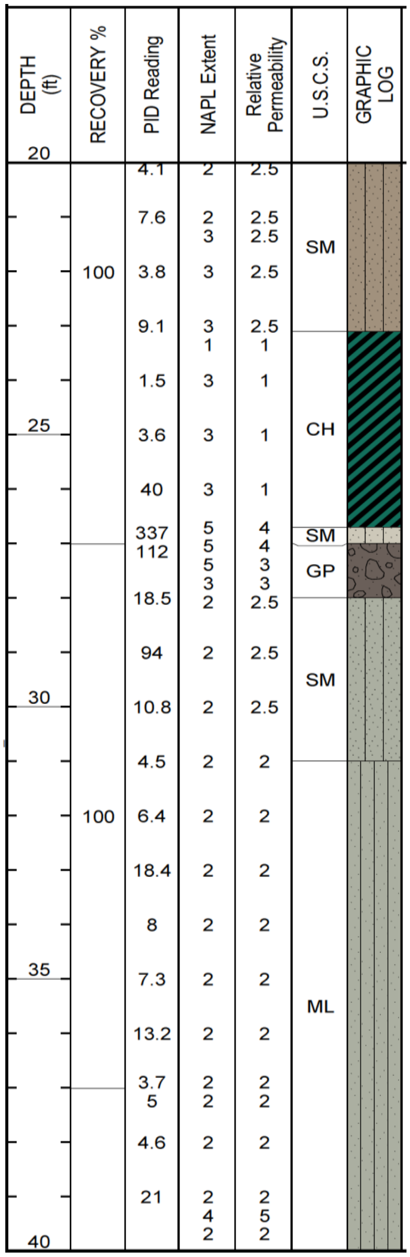
TITLE:
REAGENT VOLUME INJECTED INTO PT-11
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

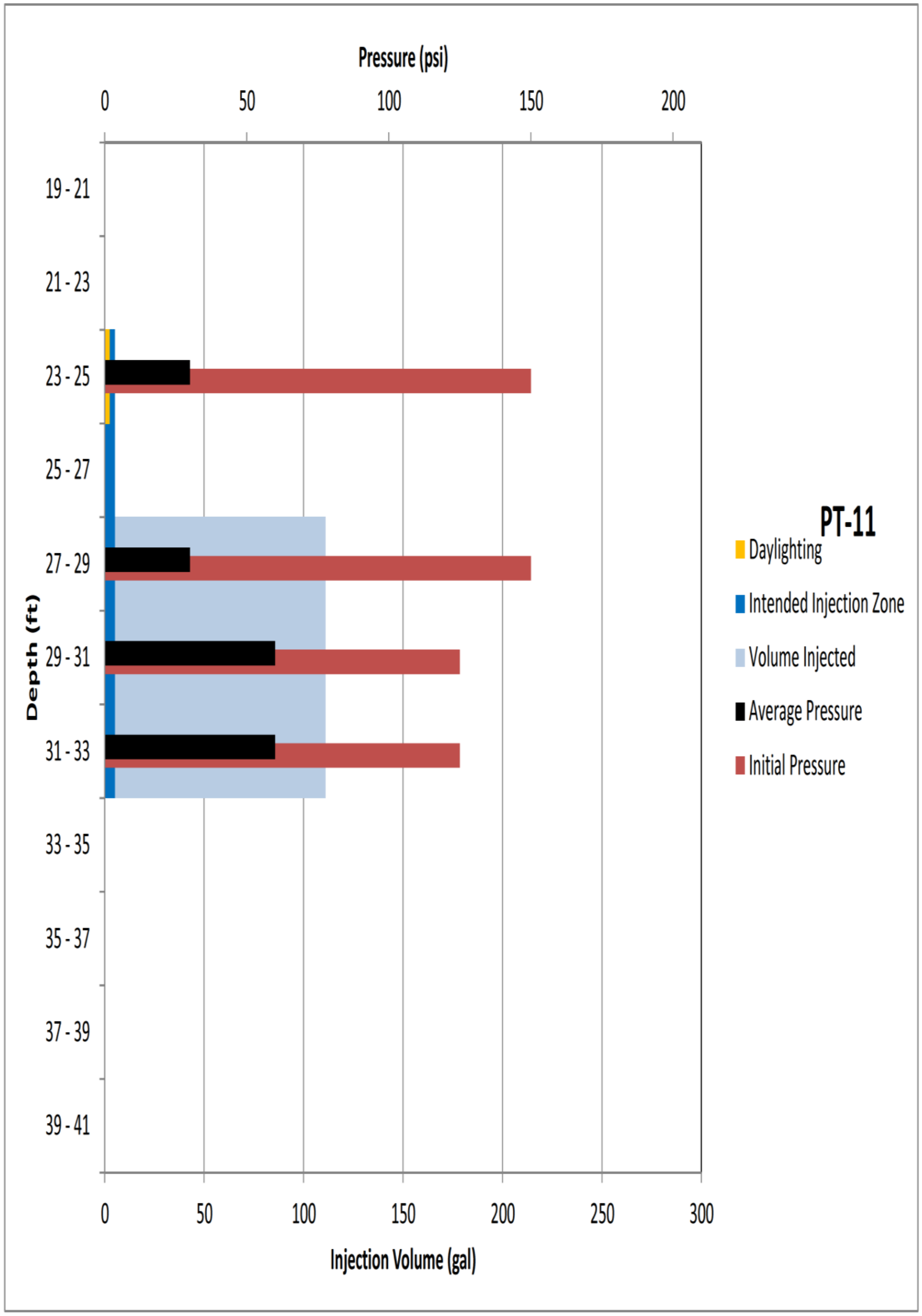
LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE	
DRAFTED	LD		
PROJECT #	117-2201329	**PT-11a**	
DATE	5-9-14		

Note:
Borehole log on left is for adjacent TIP 460N/340E.





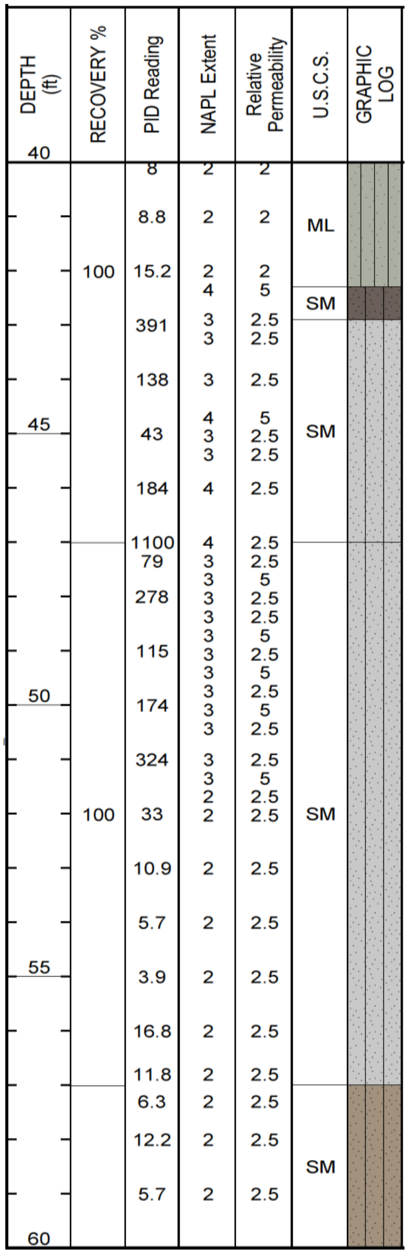
TITLE:
REAGENT VOLUME INJECTED INTO PT-11
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

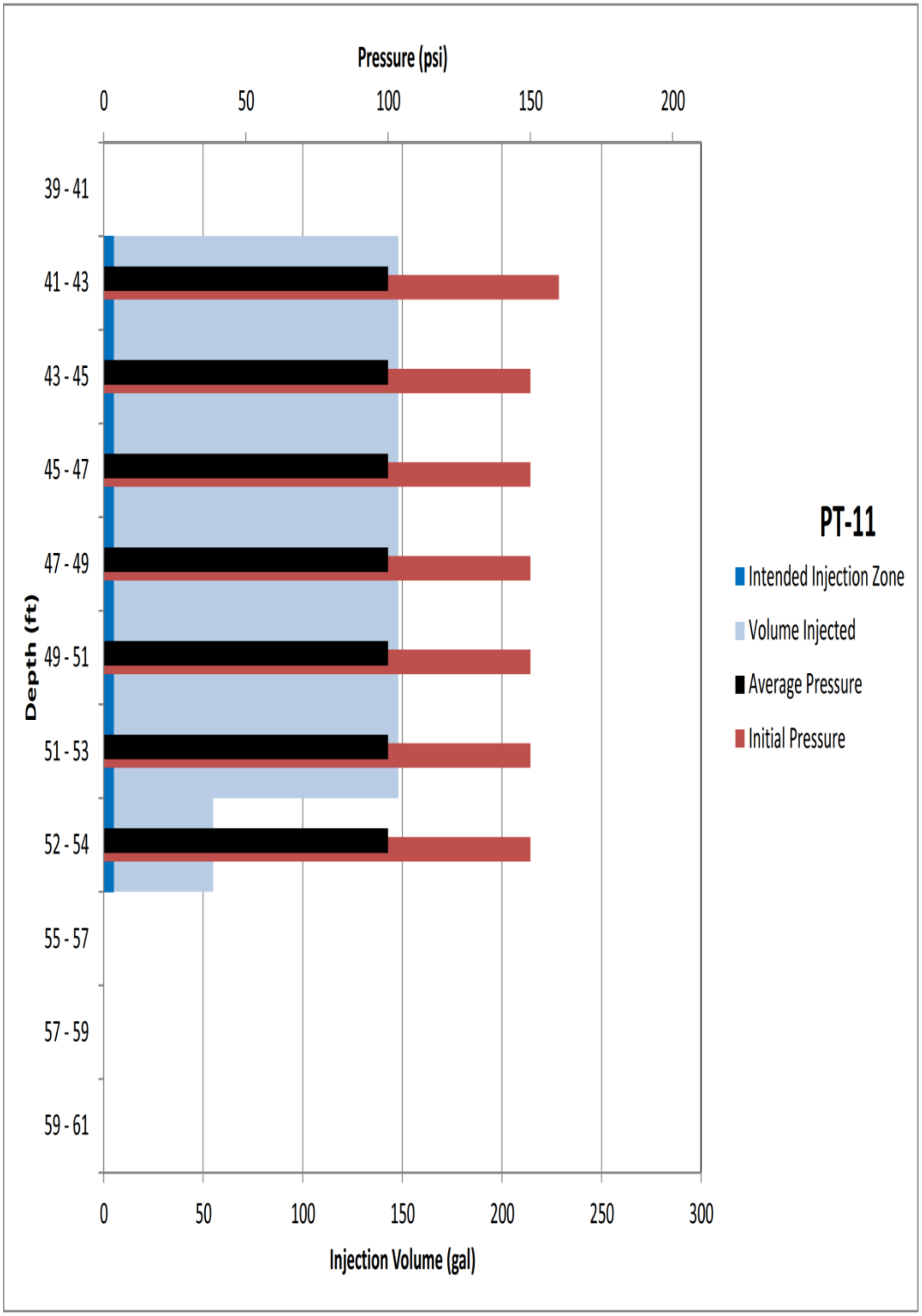
LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-11b**
PROJECT #	117-2201329	
DATE	5-9-14	

Note:
Borehole log on left is for adjacent TIP 460N/340E.





TITLE:

REAGENT VOLUME INJECTED INTO PT-11
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

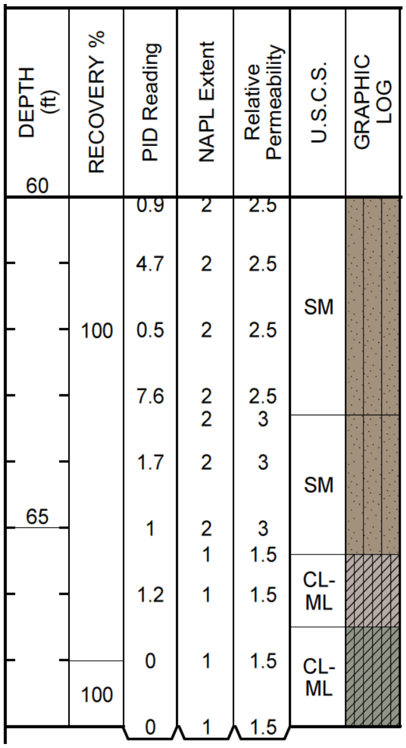
LOCATION:

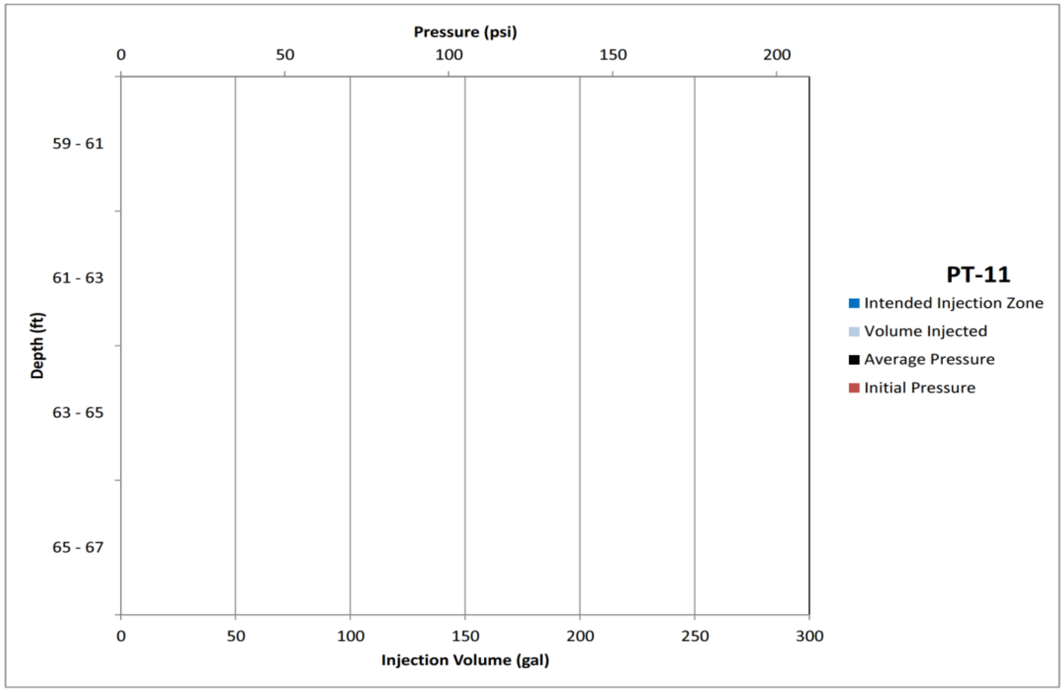
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-11c**
PROJECT #	117-2201329	
DATE	5-9-14	

Note:
Borehole log on left is for adjacent TIP 460N/340E.





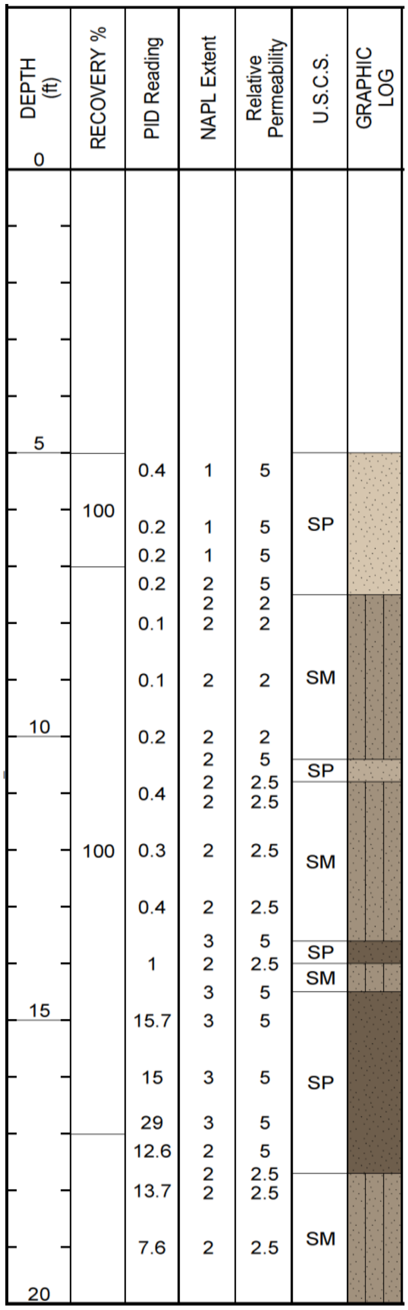
Note:
Borehole log on left is for adjacent TIP 460N/340E.

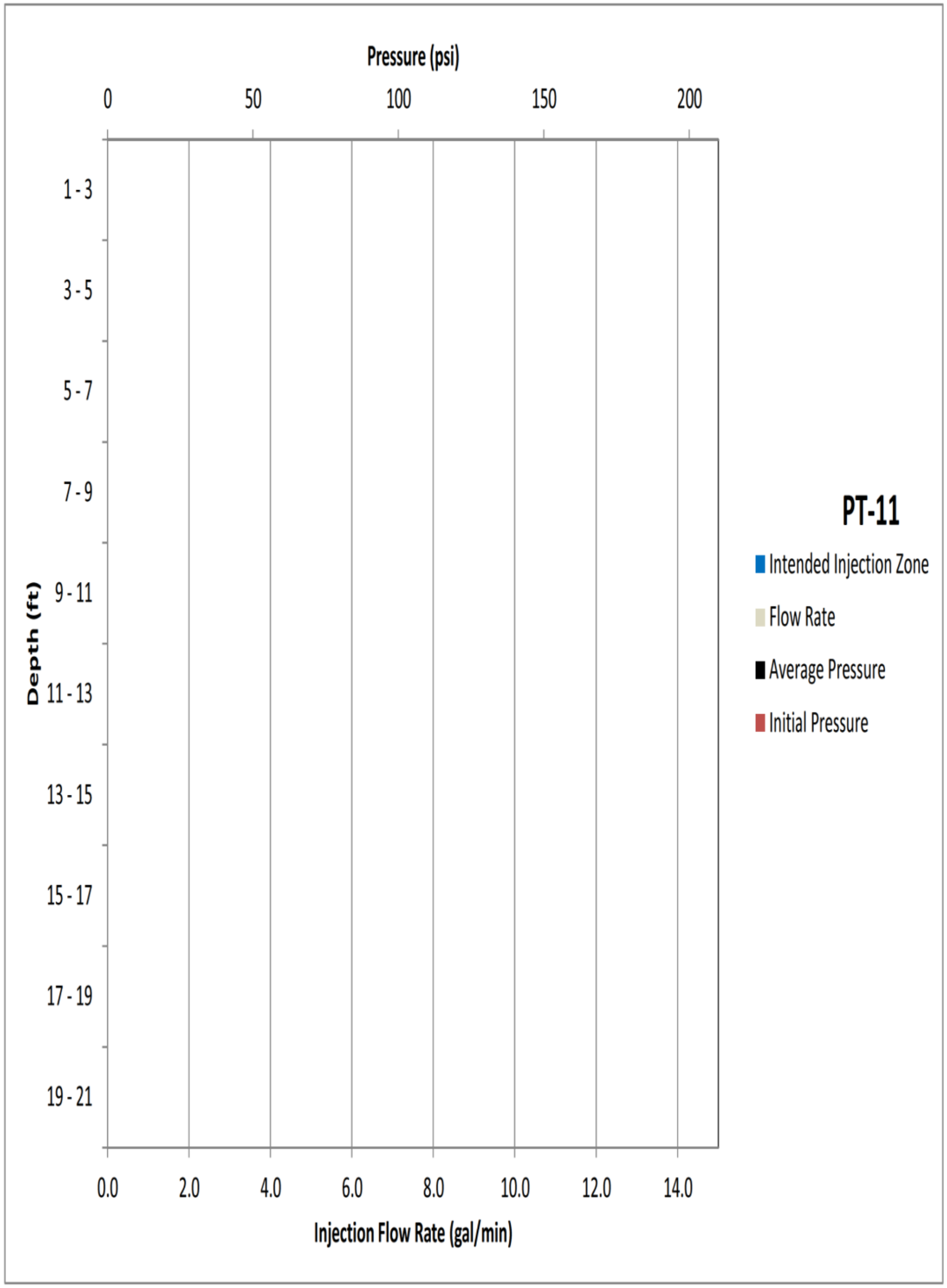
TITLE:
REAGENT VOLUME INJECTED INTO PT-11
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-11d**
PROJECT #	117-2201329	
DATE	5-9-14	





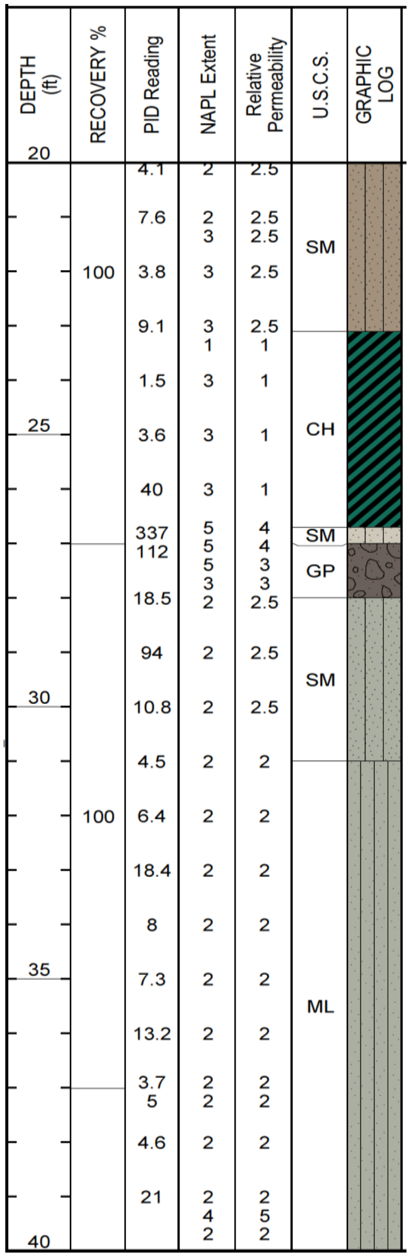
Note:
Borehole log on left is for adjacent TIP 460N/340E.

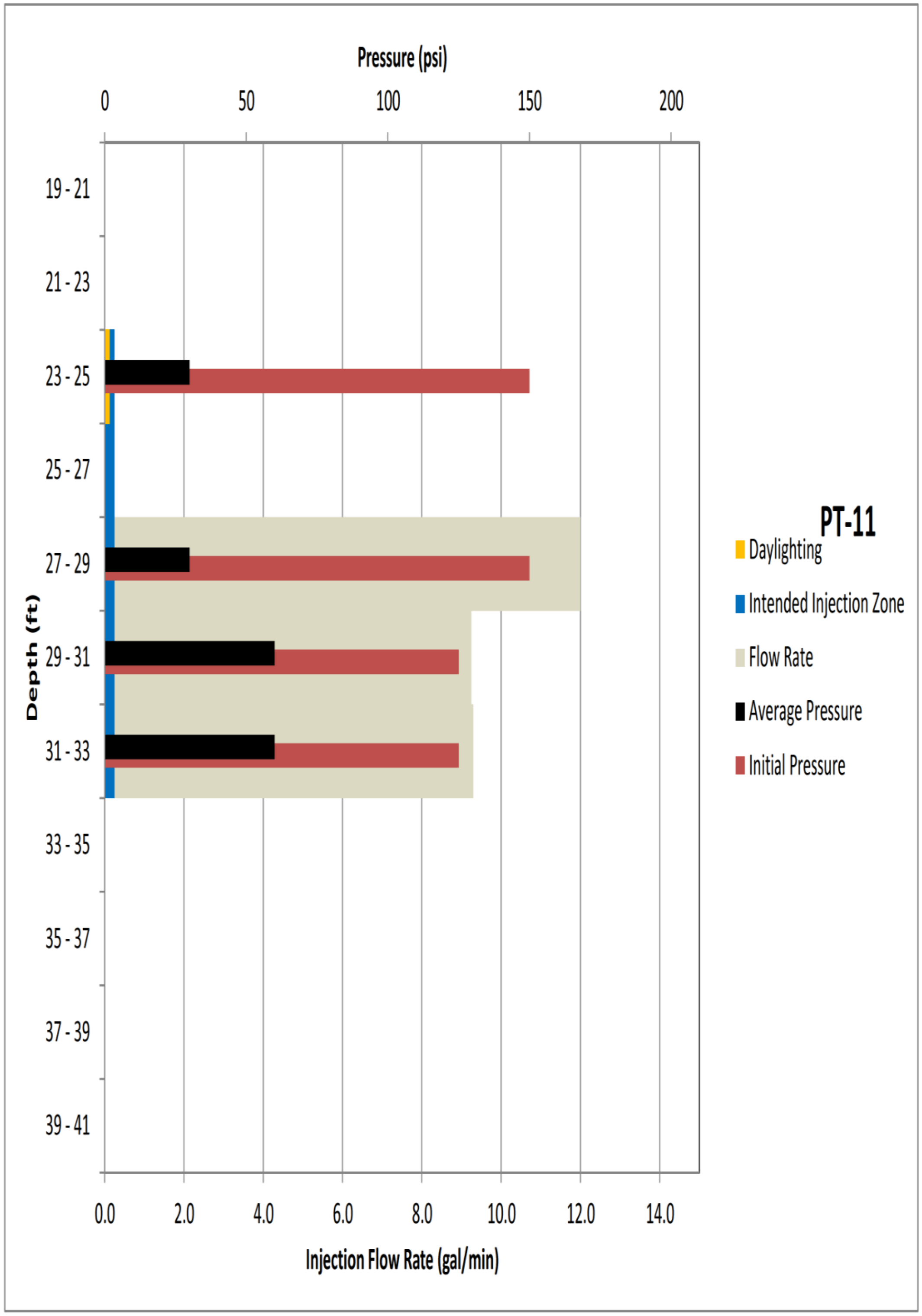
TITLE:
REAGENT FLOW RATE FOR PT-11
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-11e**
PROJECT #	117-2201329	
DATE	5-9-14	



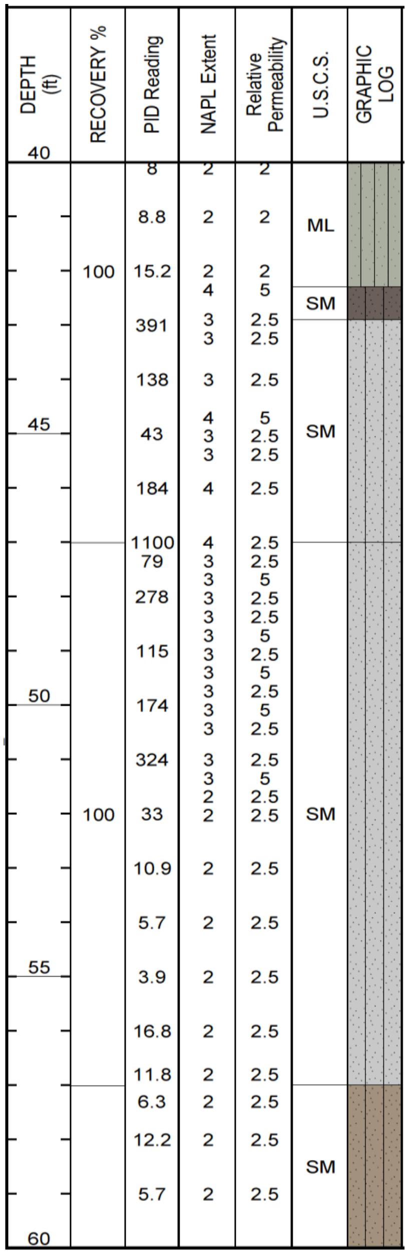


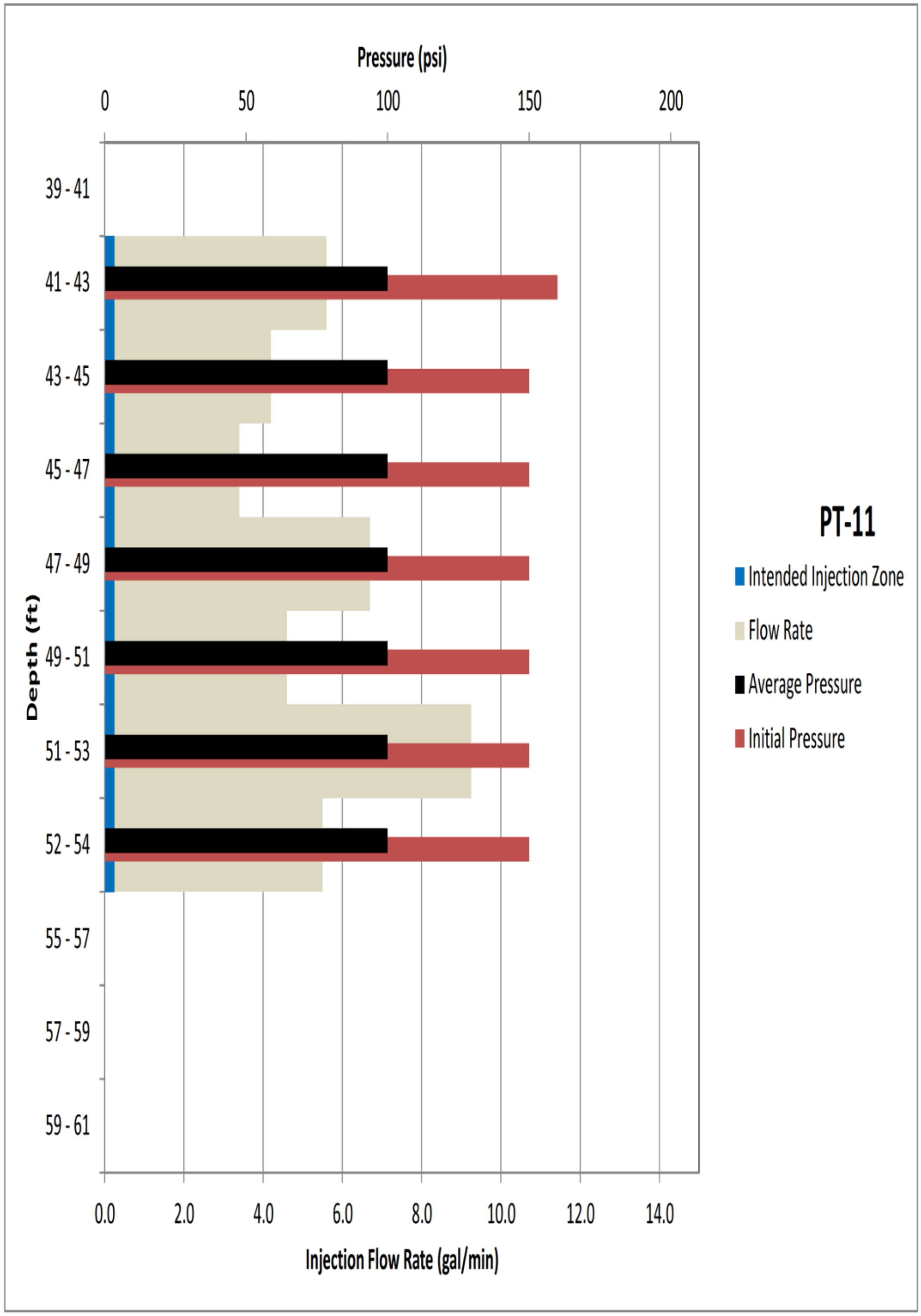
Note:
Borehole log on left is for adjacent TIP 460N/340E.

TITLE:	REAGENT FLOW RATE FOR PT-11 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida

TETRA TECH

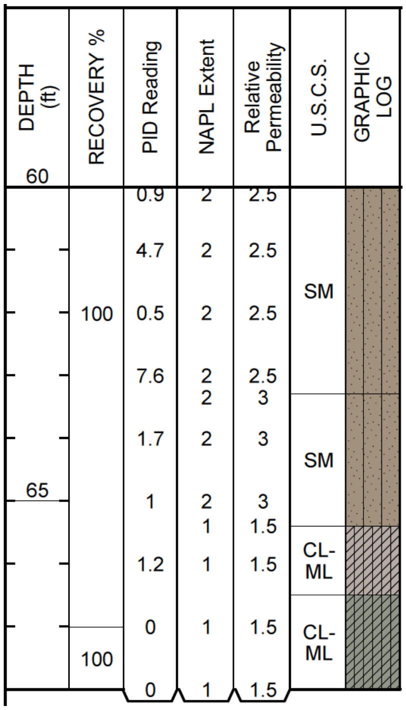
APPROVED	JE	FIGURE
DRAFTED	LD	PT-11f
PROJECT #	117-2201329	
DATE	5-9-14	

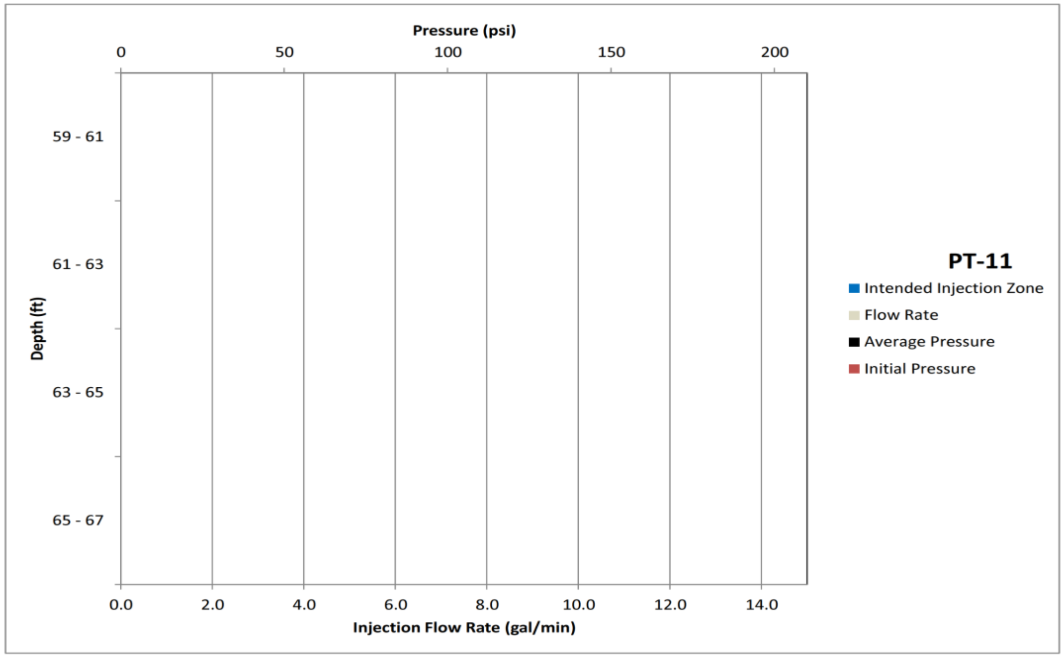




Note:
Borehole log on left is for adjacent TIP 460N/340E.

TITLE:	REAGENT FLOW RATE FOR PT-11 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES			
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida			
TETRA TECH	APPROVED	JE	FIGURE	
	DRAFTED	LD	PT-11g	
	PROJECT #	117-2201329		
	DATE	5-9-14		





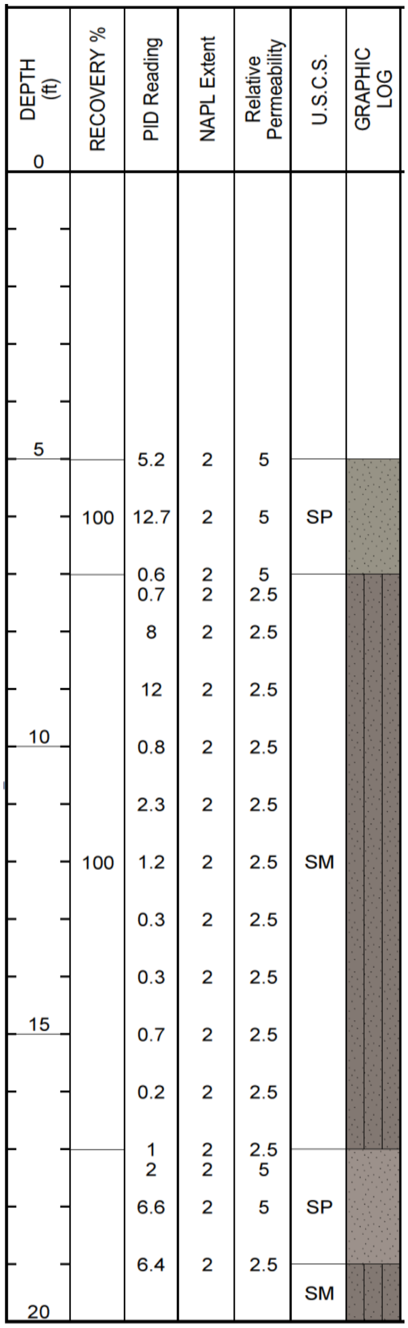
Note:
Borehole log on left is for adjacent TIP 460N/340E.

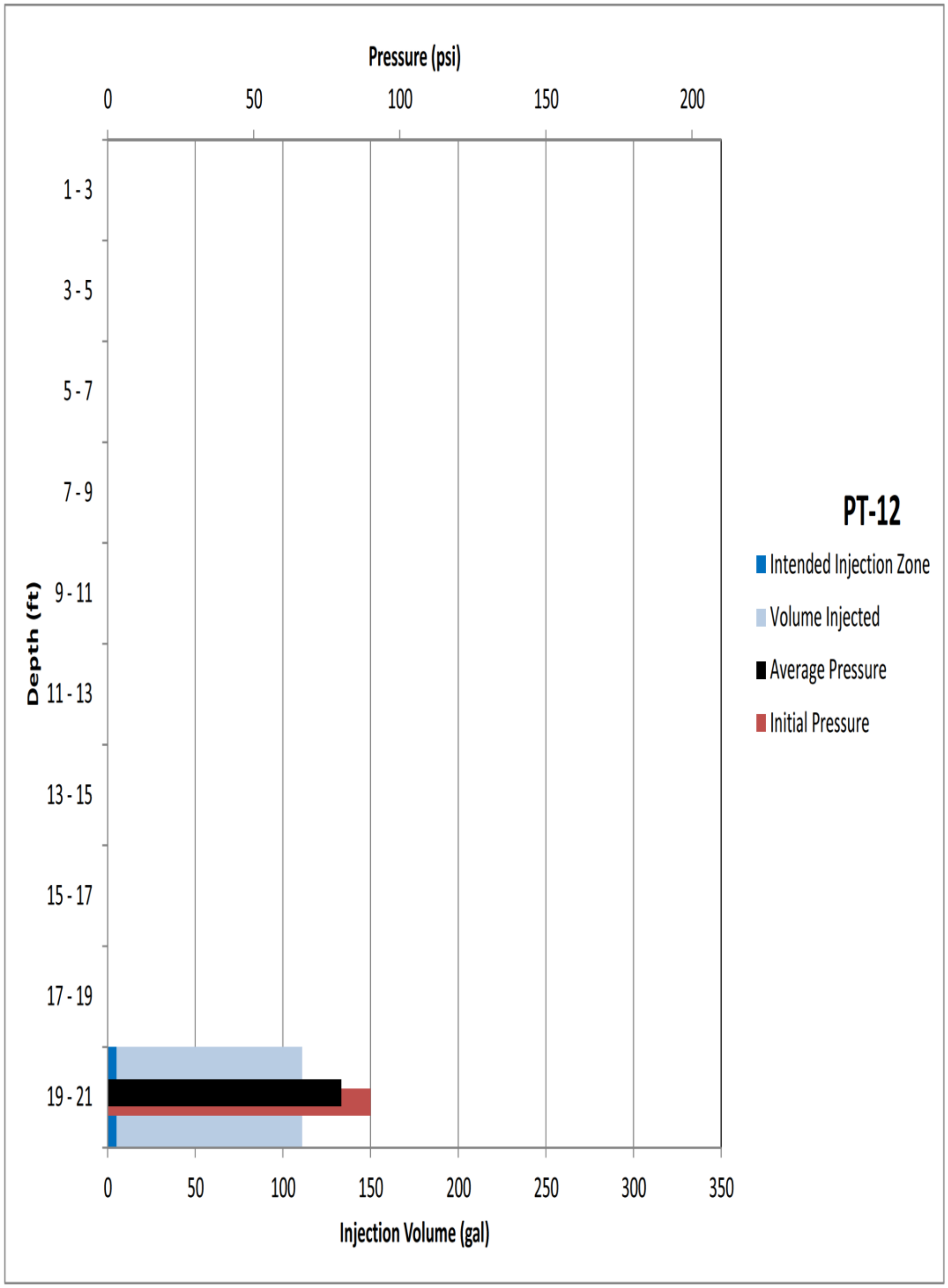
TITLE:
REAGENT FLOW RATE FOR PT-11
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-11h**
PROJECT #	117-2201329	
DATE	5-9-14	





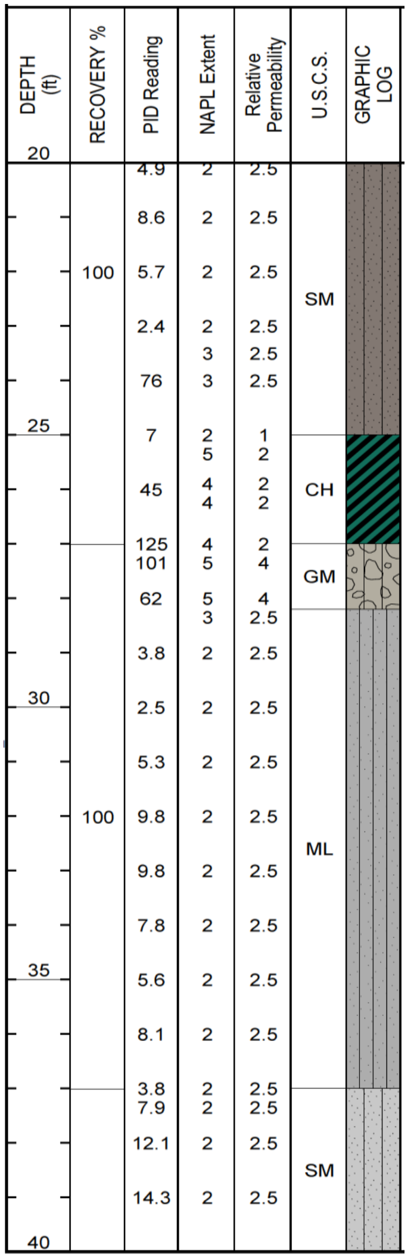
Note:
Borehole log on left is for adjacent TIP 420N/345E.

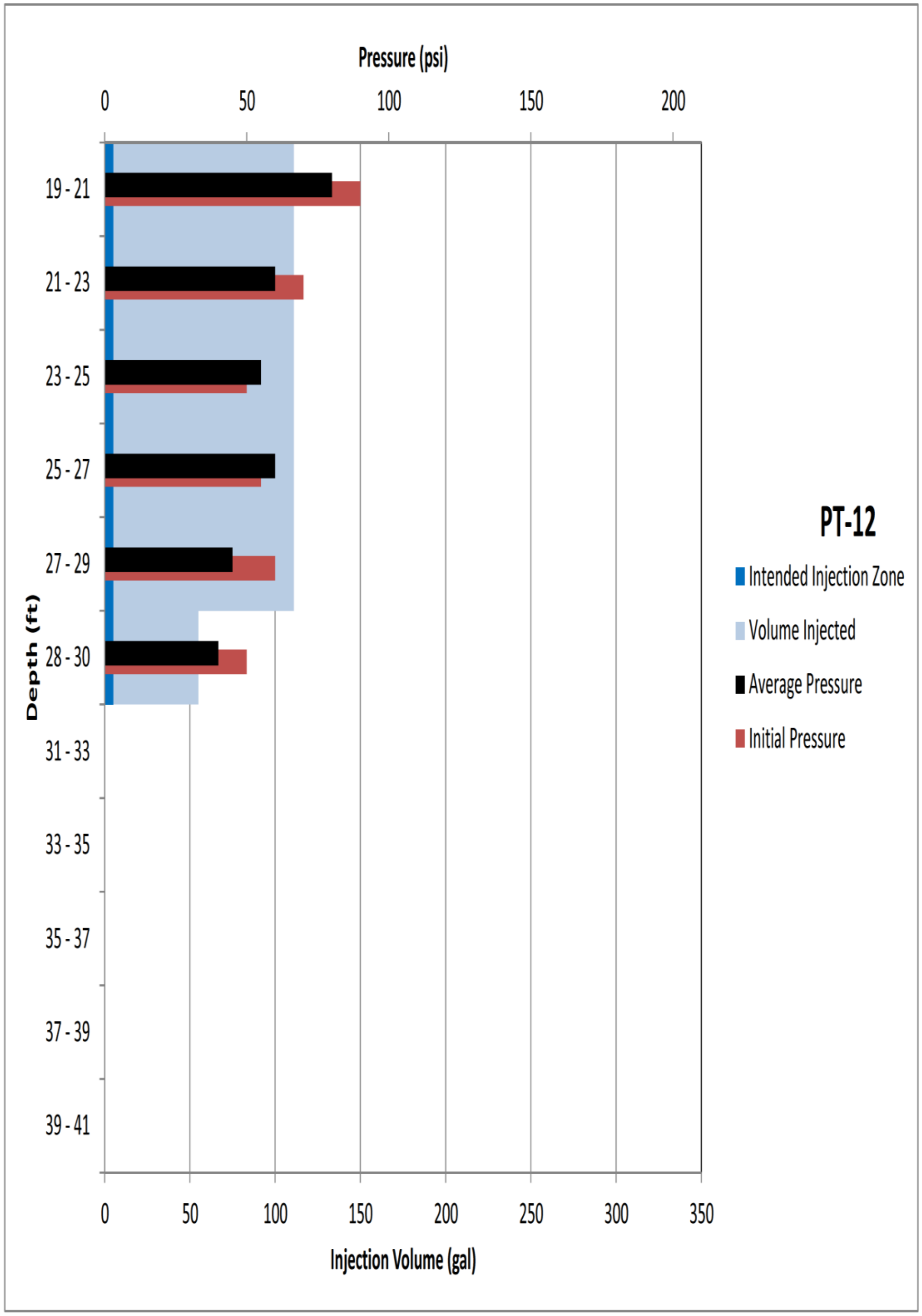
TITLE: **REAGENT VOLUME INJECTED INTO PT-12 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-12a**
PROJECT #	117-2201329	
DATE	4-21-14	





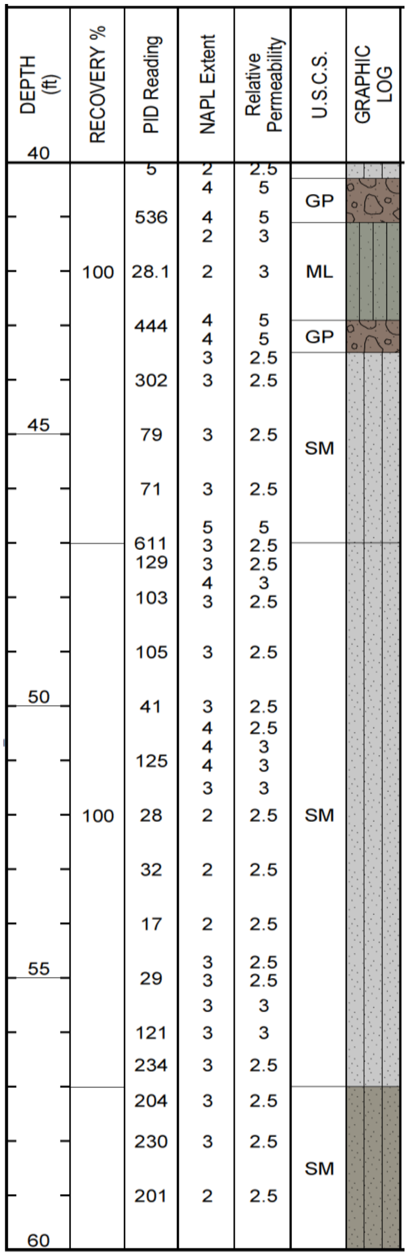
Note:
Borehole log on left is for adjacent TIP 420N/345E.

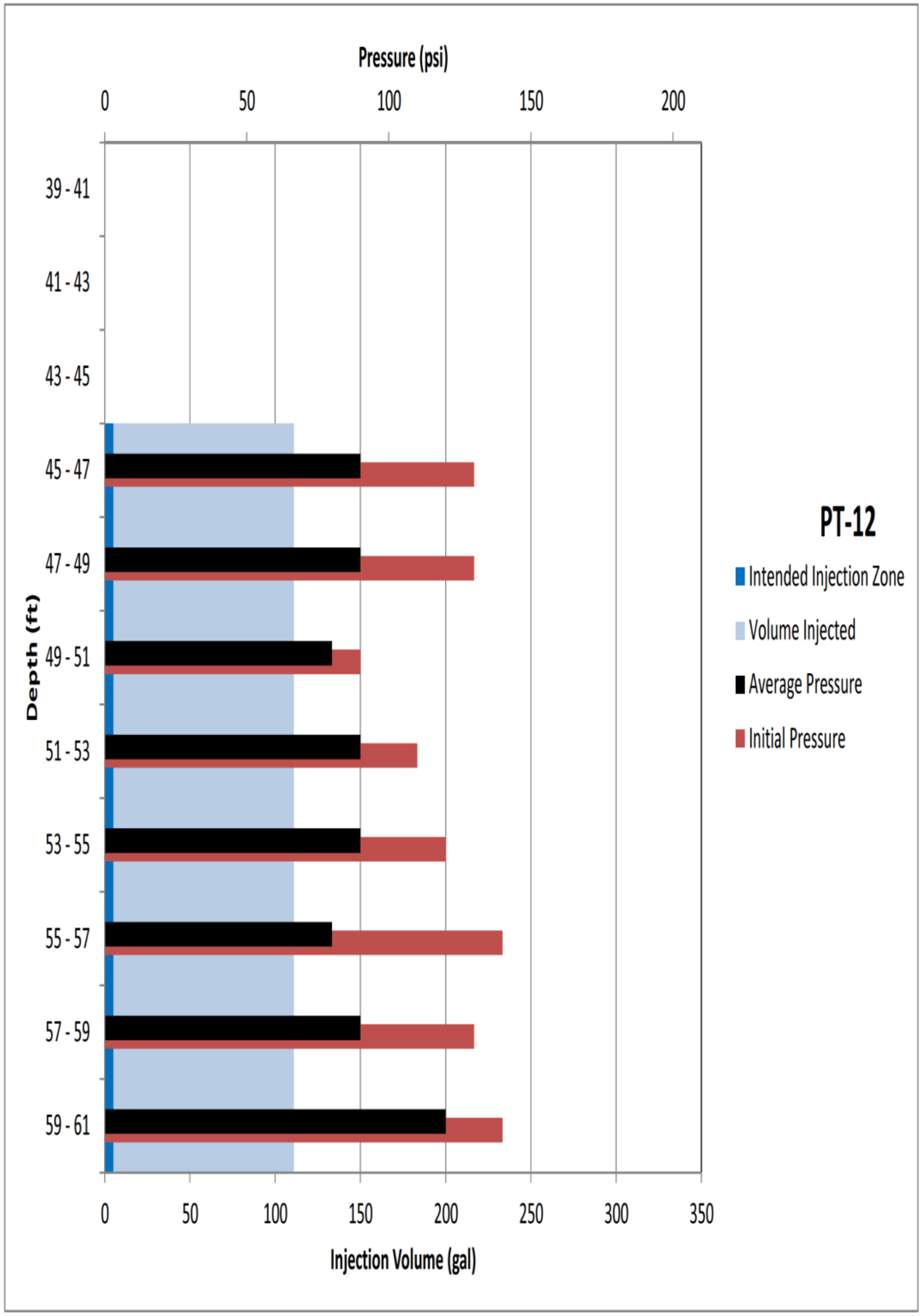
TITLE:
REAGENT VOLUME INJECTED INTO PT-12
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

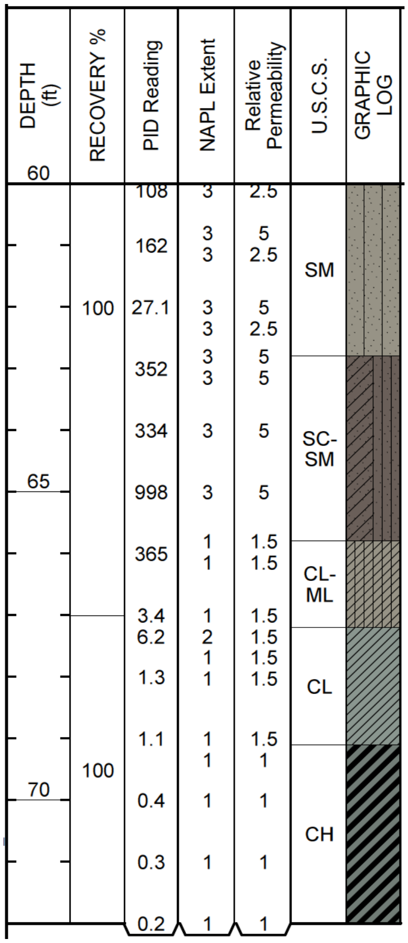
APPROVED	JE	FIGURE
DRAFTED	LD	**PT-12b**
PROJECT #	117-2201329	
DATE	4-21-14	

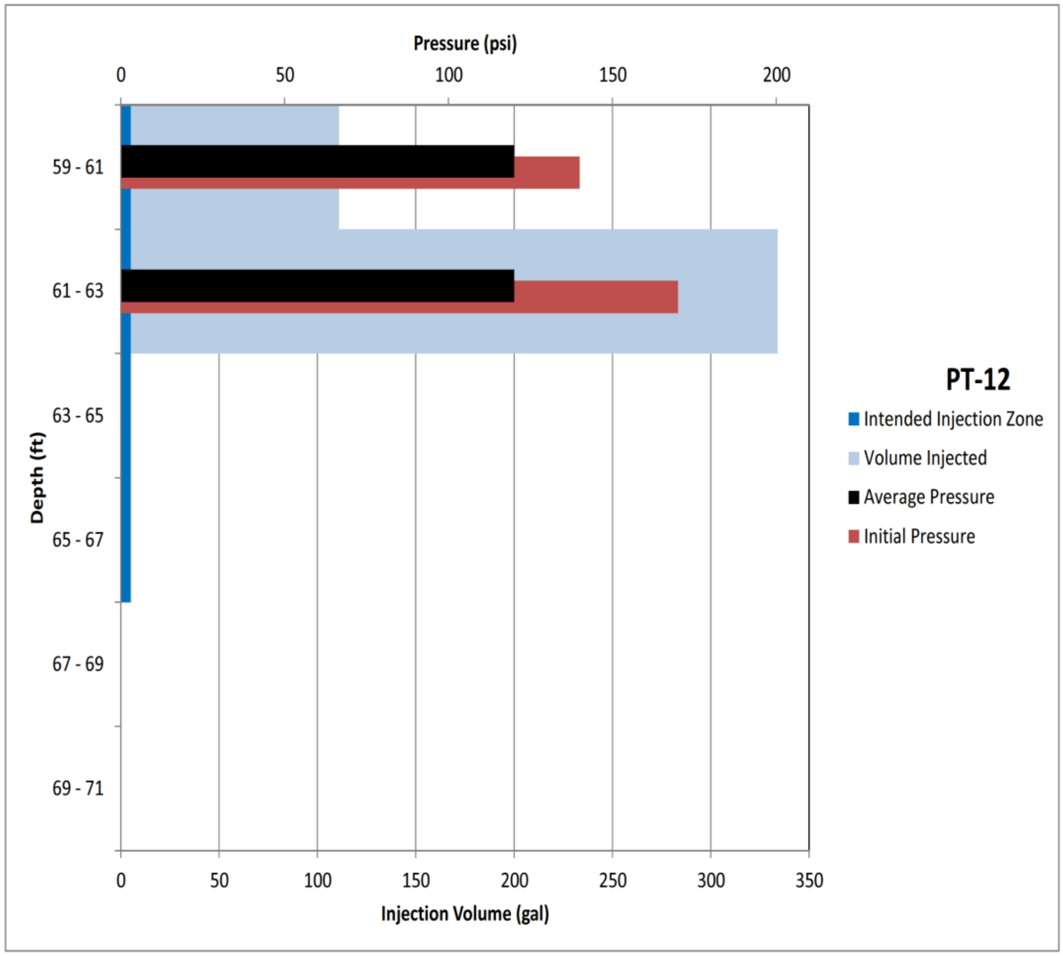




TITLE:	REAGENT VOLUME INJECTED INTO PT-12 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES		
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida		
TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	LD	PT-12c
	PROJECT #	117-2201329	
	DATE	4-21-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.





TITLE: **REAGENT VOLUME INJECTED INTO PT-12 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

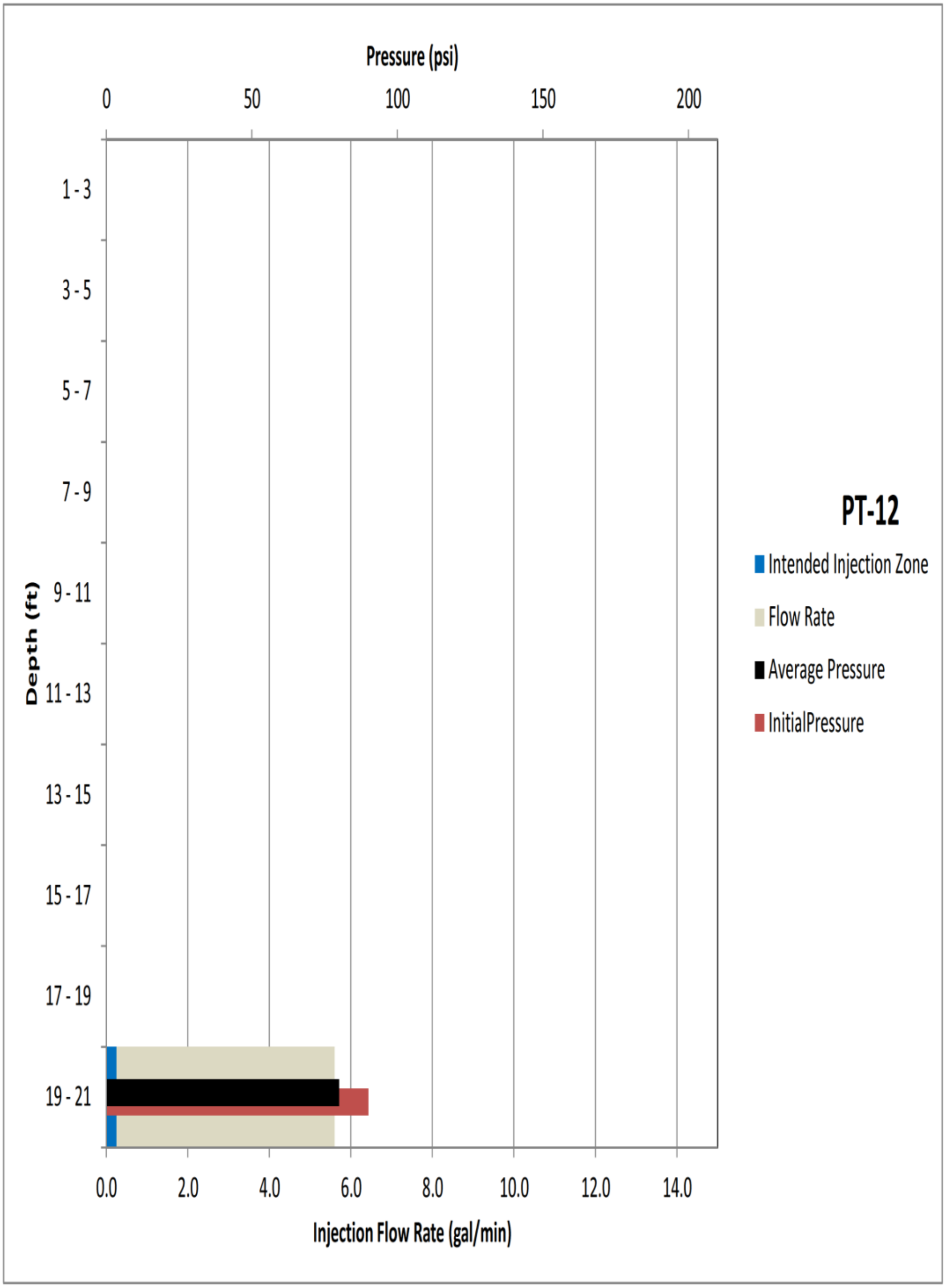
LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-12d**
PROJECT #	117-2201329	
DATE	4-21-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
0						
5		5.2	2	5		
	100	12.7	2	5	SP	
		0.6 0.7	2 2	5 2.5		
		8	2	2.5		
		12	2	2.5		
10		0.8	2	2.5		
		2.3	2	2.5		
	100	1.2	2	2.5	SM	
		0.3	2	2.5		
		0.3	2	2.5		
15		0.7	2	2.5		
		0.2	2	2.5		
		1 2	2 2	2.5 5		
		6.6	2	5	SP	
		6.4	2	2.5		
20					SM	



TITLE:

REAGENT FLOW RATE FOR PT-12
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:

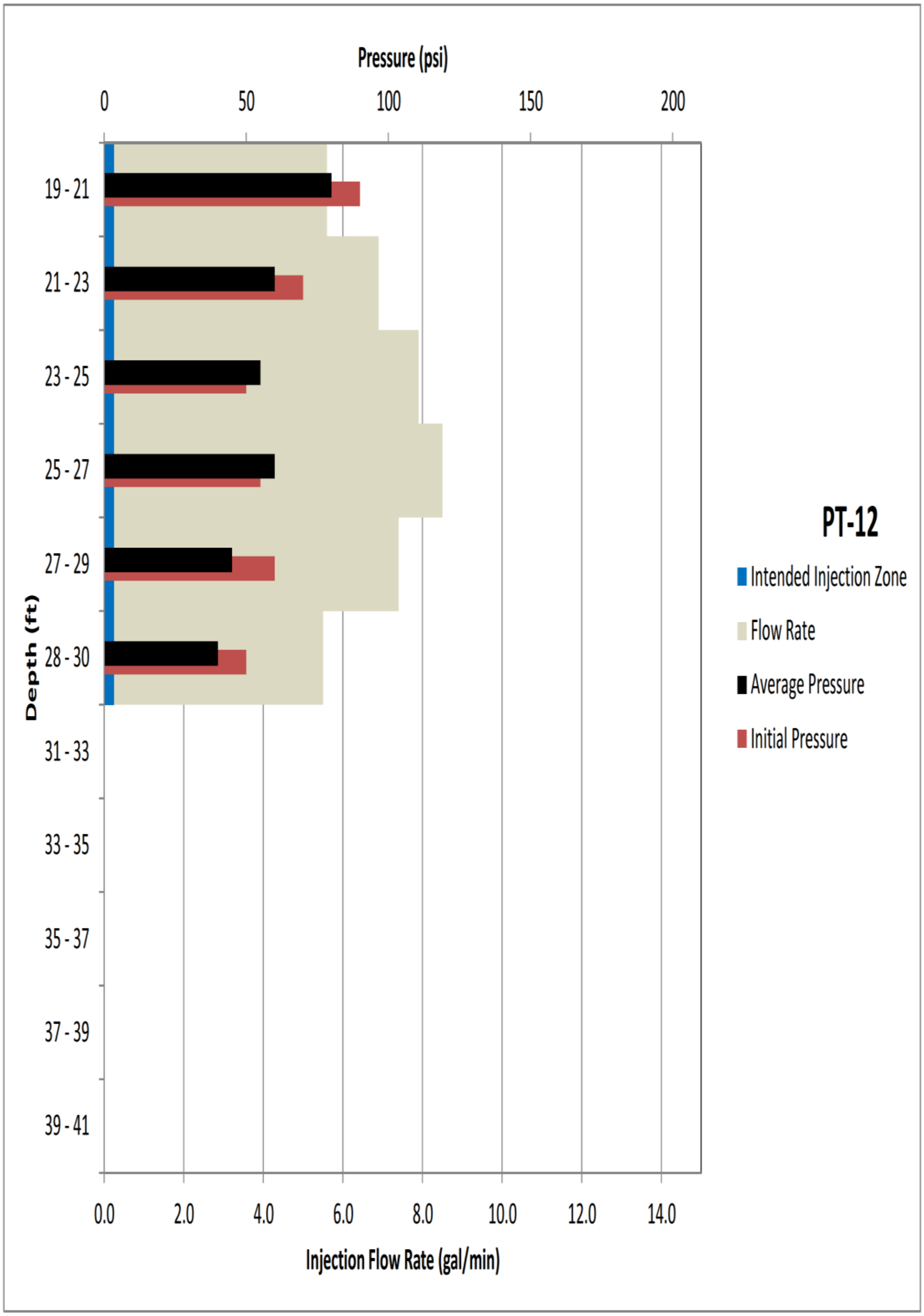
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-12e**
PROJECT #	117-2201329	
DATE	4-28-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.
20		4.9	2	2.5	
		8.6	2	2.5	
	100	5.7	2	2.5	
		2.4	2	2.5	SM
			3	2.5	
		76	3	2.5	
25		7	2 5	1 2	
		45	4 4	2 2	CH
		125 101	4 5	2 4	
		62	5 3	4 2.5	GM
		3.8	2	2.5	
30		2.5	2	2.5	
		5.3	2	2.5	
	100	9.8	2	2.5	
		9.8	2	2.5	ML
		7.8	2	2.5	
35		5.6	2	2.5	
		8.1	2	2.5	
		3.8 7.9	2 2	2.5 2.5	
		12.1	2	2.5	
		14.3	2	2.5	SM
40					



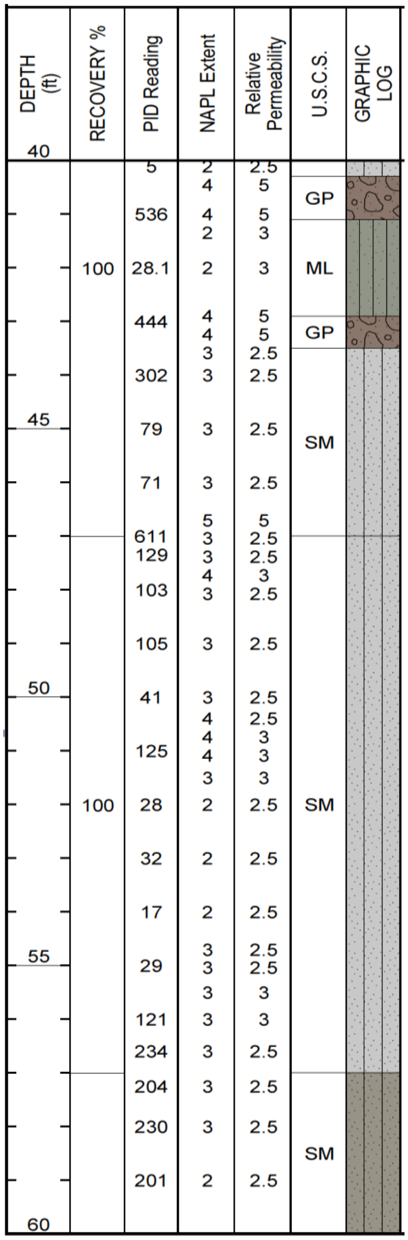
Note:
Borehole log on left is for adjacent TIP 420N/345E.

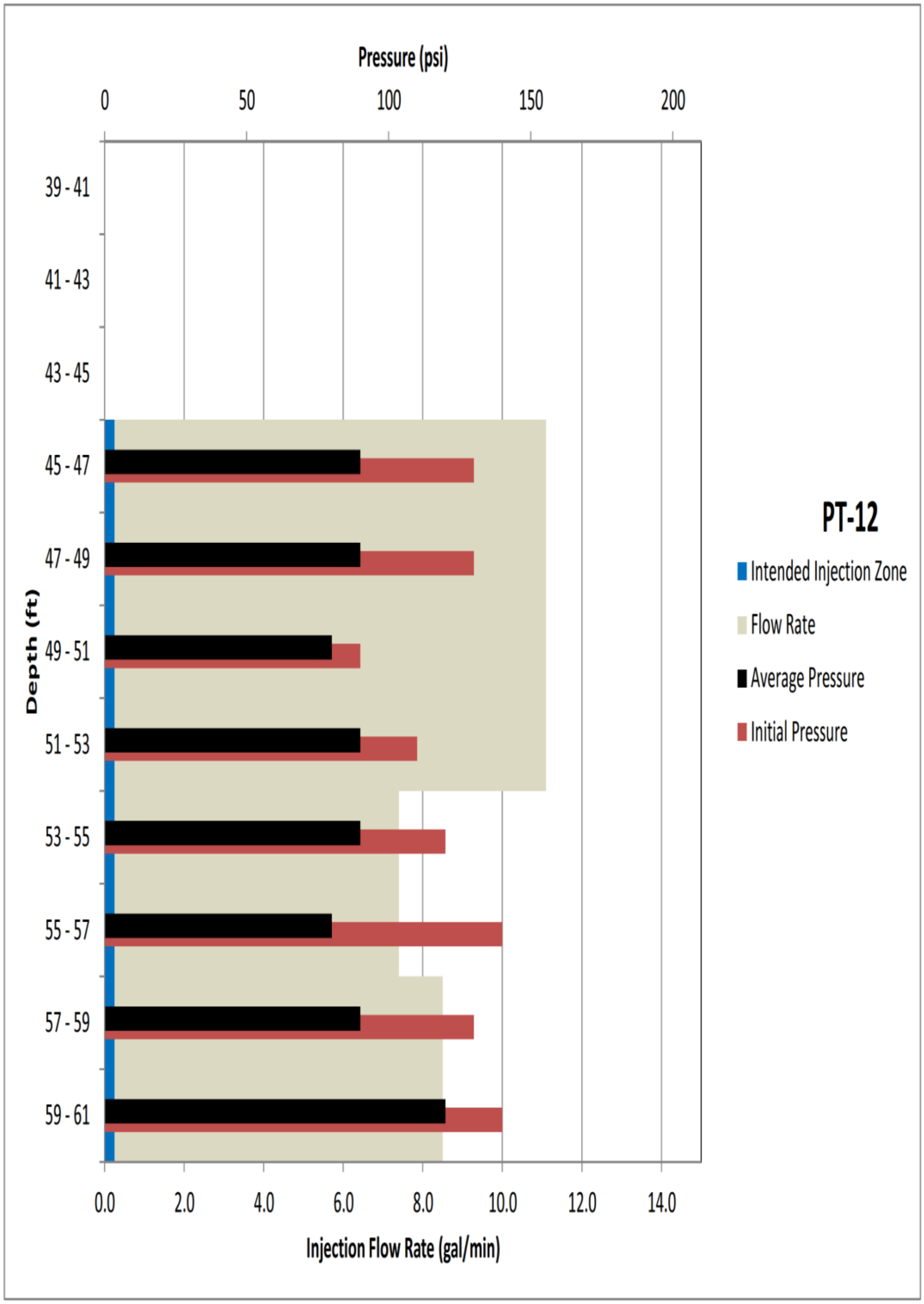
TITLE: **REAGENT FLOW RATE FOR PT-12 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-12f**
PROJECT #	117-2201329	
DATE	4-28-14	





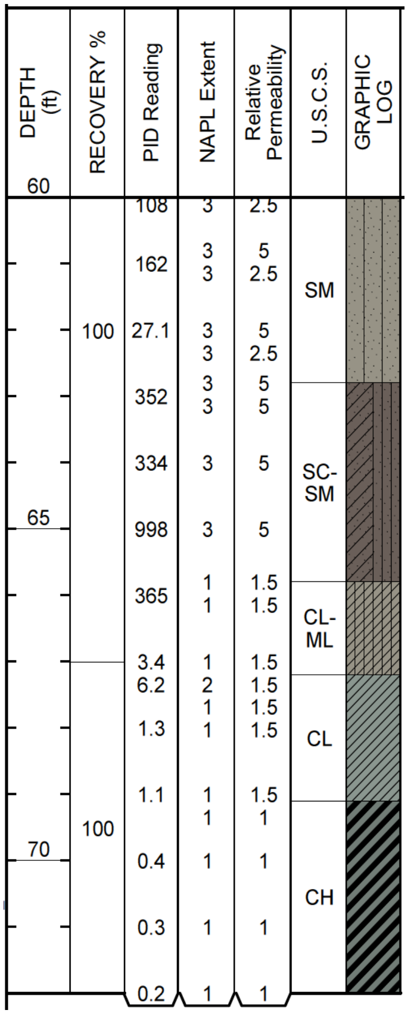
Note:
Borehole log on left is for adjacent TIP 420N/345E.

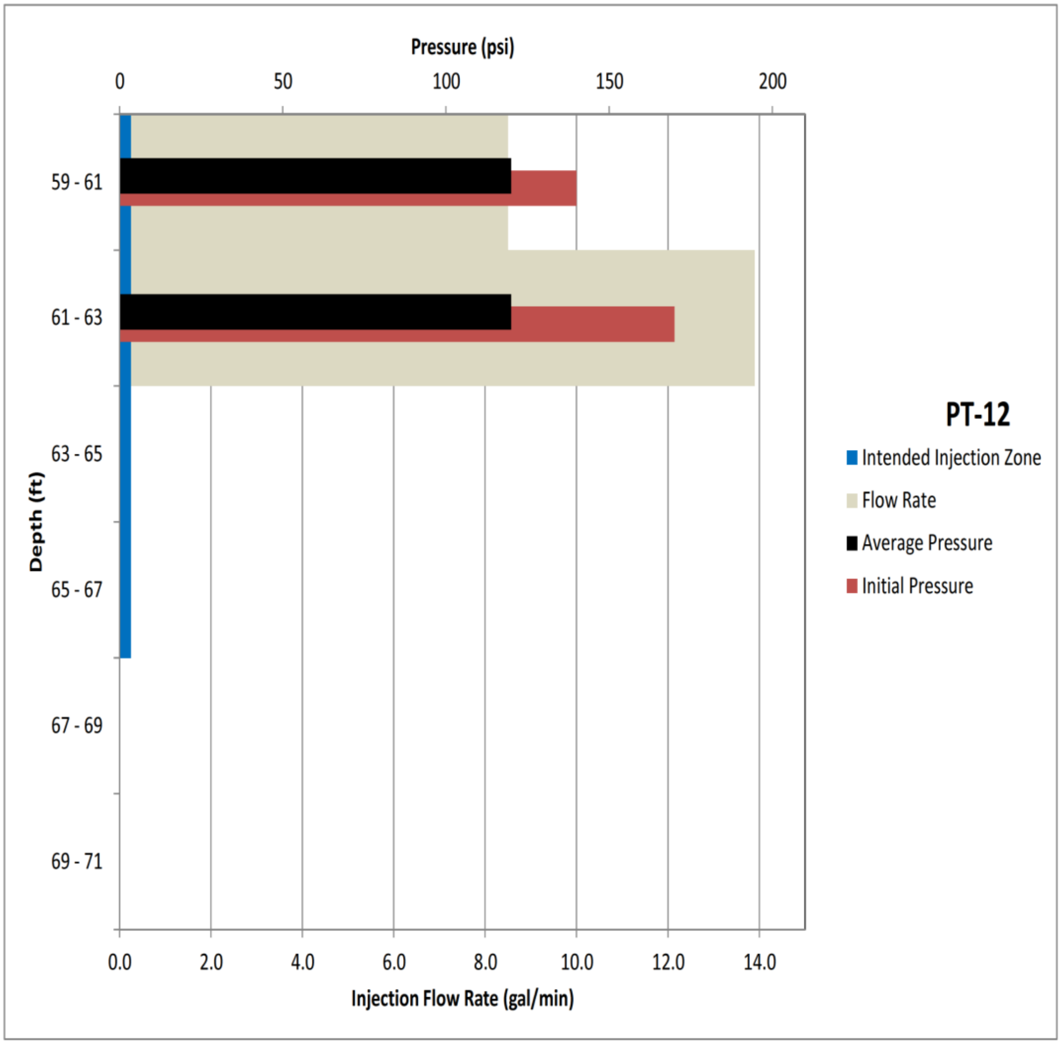
TITLE:
REAGENT FLOW RATE FOR PT-12
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-12g**
PROJECT #	117-2201329	
DATE	4-28-14	



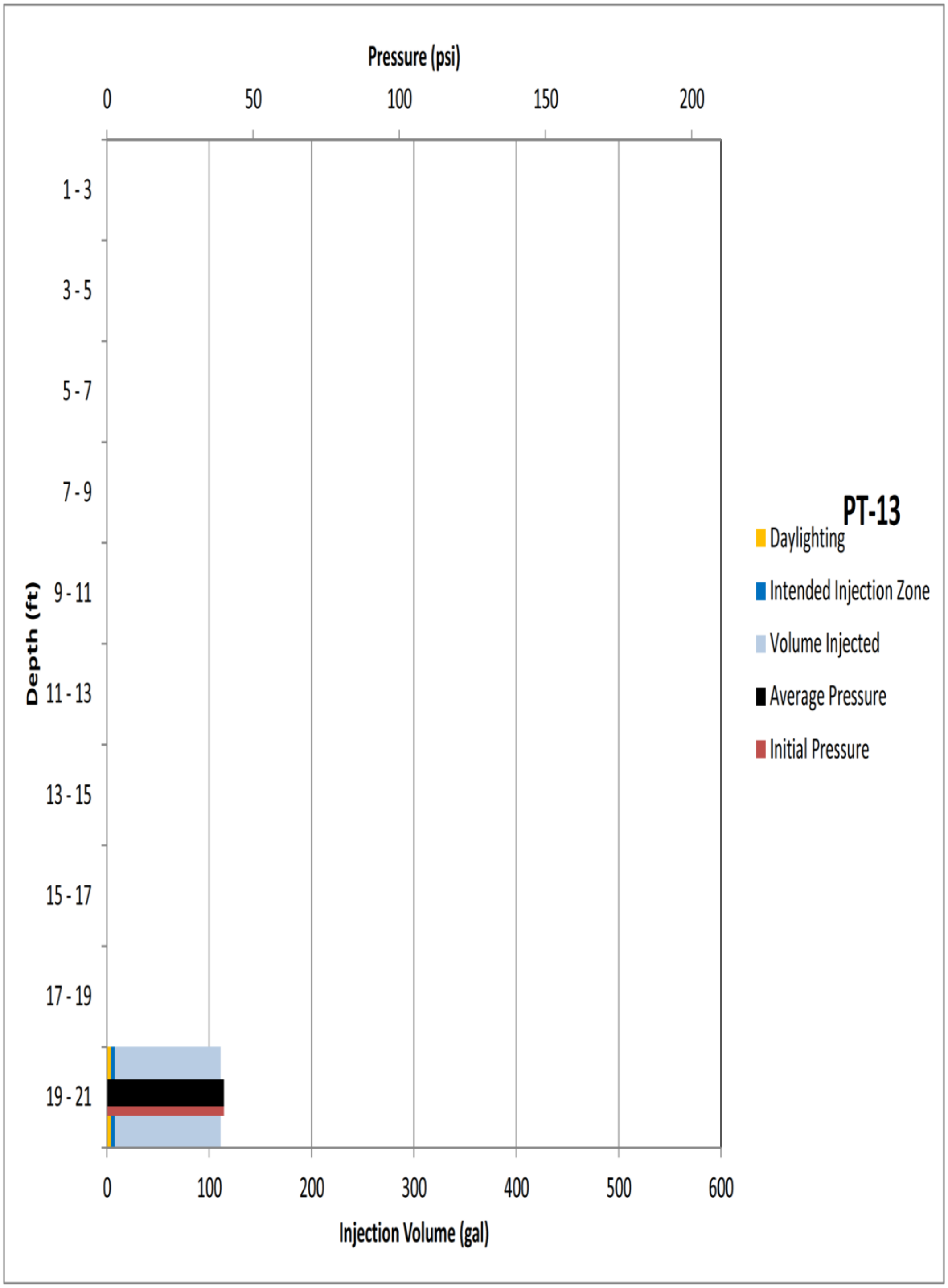


Note:
Borehole log on left is for adjacent TIP 420N/345E.

TITLE:	REAGENT FLOW RATE FOR PT-12 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida

TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	LD	PT-12h
	PROJECT #	117-2201329	
	DATE	4-28-14	

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
0						
5		5.2	2	5		
	100	12.7	2	5	SP	
		0.6 0.7	2 2	5 2.5		
		8	2	2.5		
		12	2	2.5		
10		0.8	2	2.5		
		2.3	2	2.5		
	100	1.2	2	2.5	SM	
		0.3	2	2.5		
		0.3	2	2.5		
15		0.7	2	2.5		
		0.2	2	2.5		
		1 2	2 2	2.5 5		
		6.6	2	5	SP	
		6.4	2	2.5		
					SM	
20						



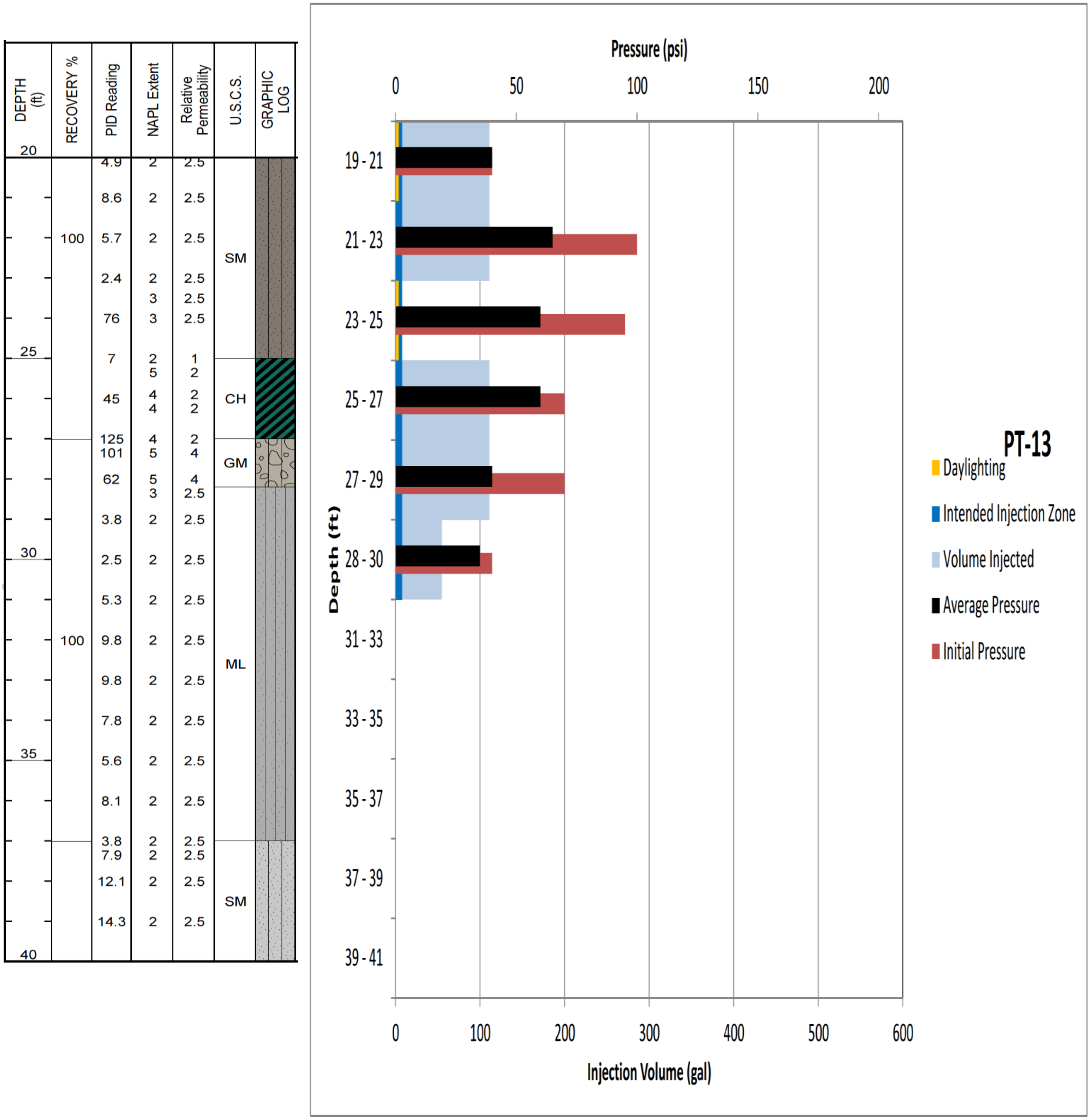
TITLE:
REAGENT VOLUME INJECTED INTO PT-13 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-13a**
PROJECT #	117-2201329	
DATE	5-9-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.

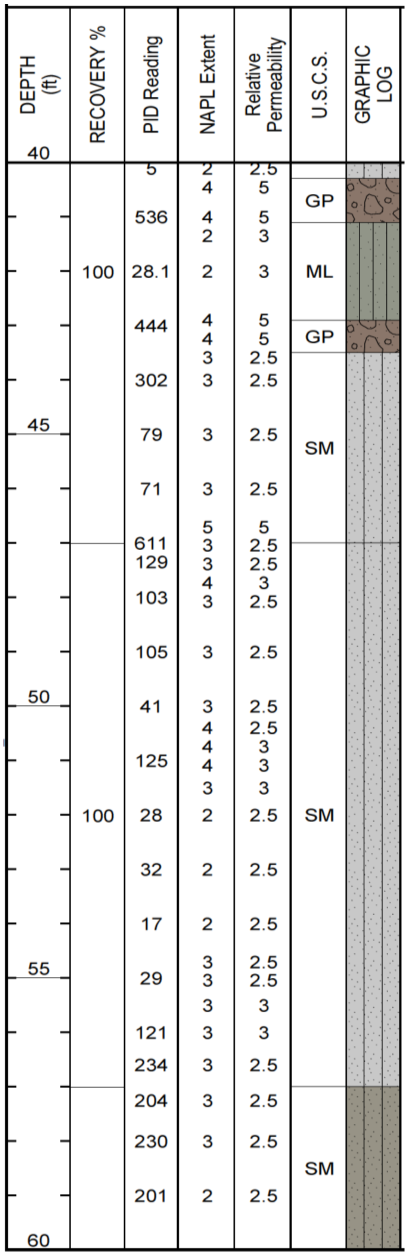


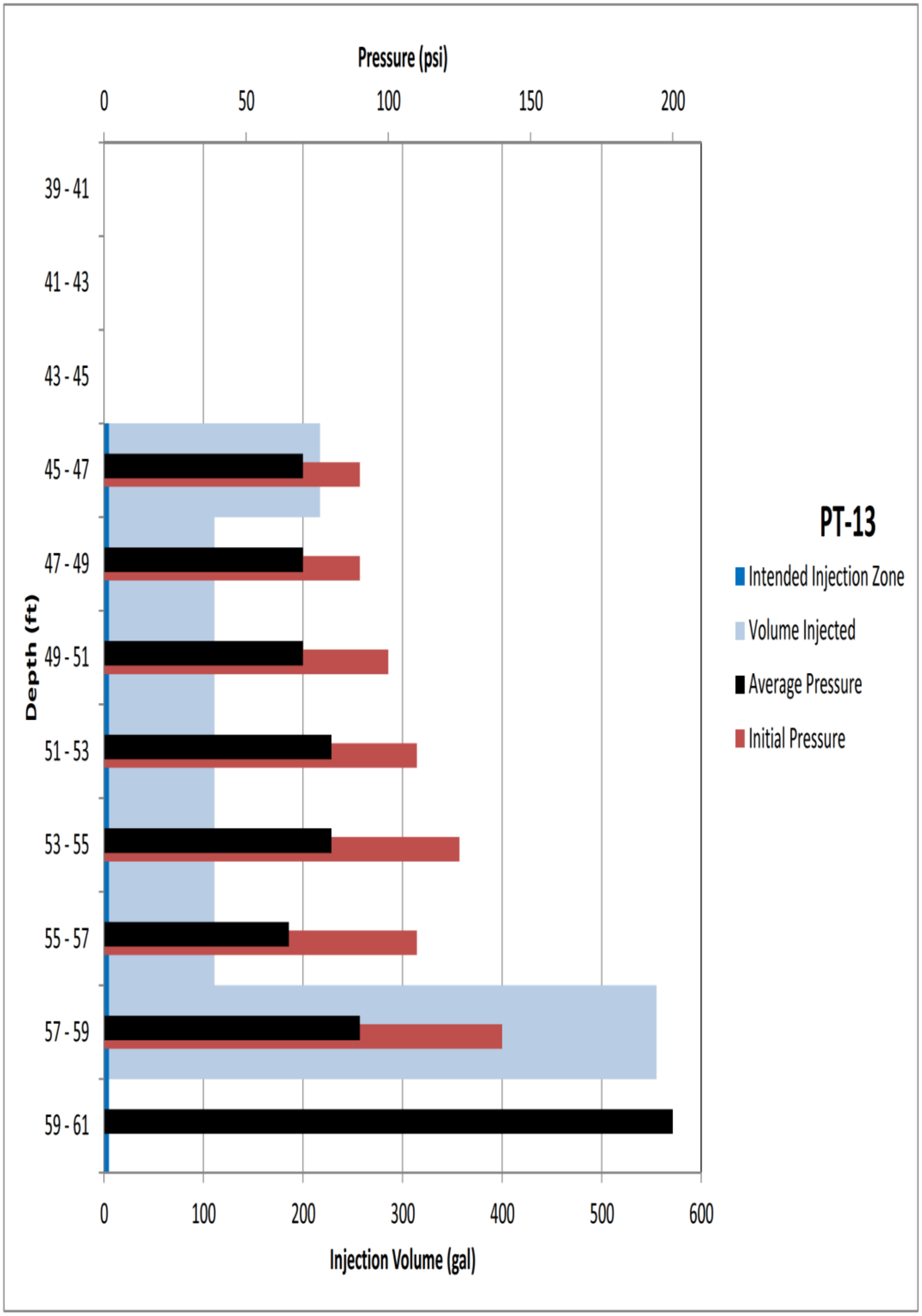
TITLE:	**REAGENT VOLUME INJECTED INTO PT-13 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**
LOCATION:	**Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-13b**
PROJECT #	117-2201329	
DATE	5-9-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.





TITLE:

REAGENT VOLUME INJECTED INTO PT-13 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

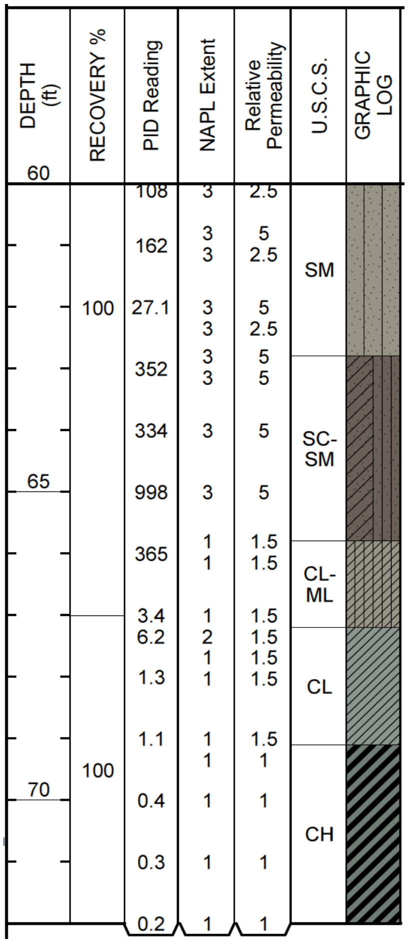
LOCATION:

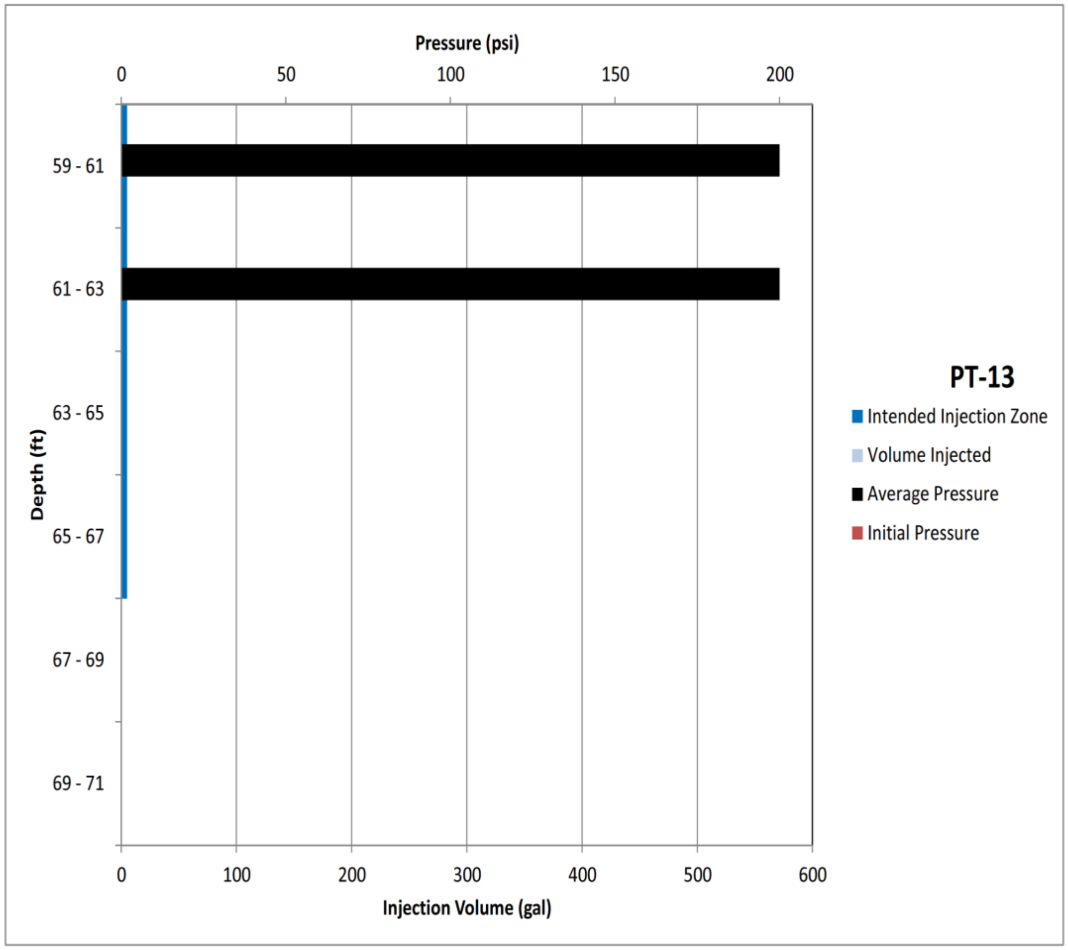
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-13c**
PROJECT #	117-2201329	
DATE	5-9-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.

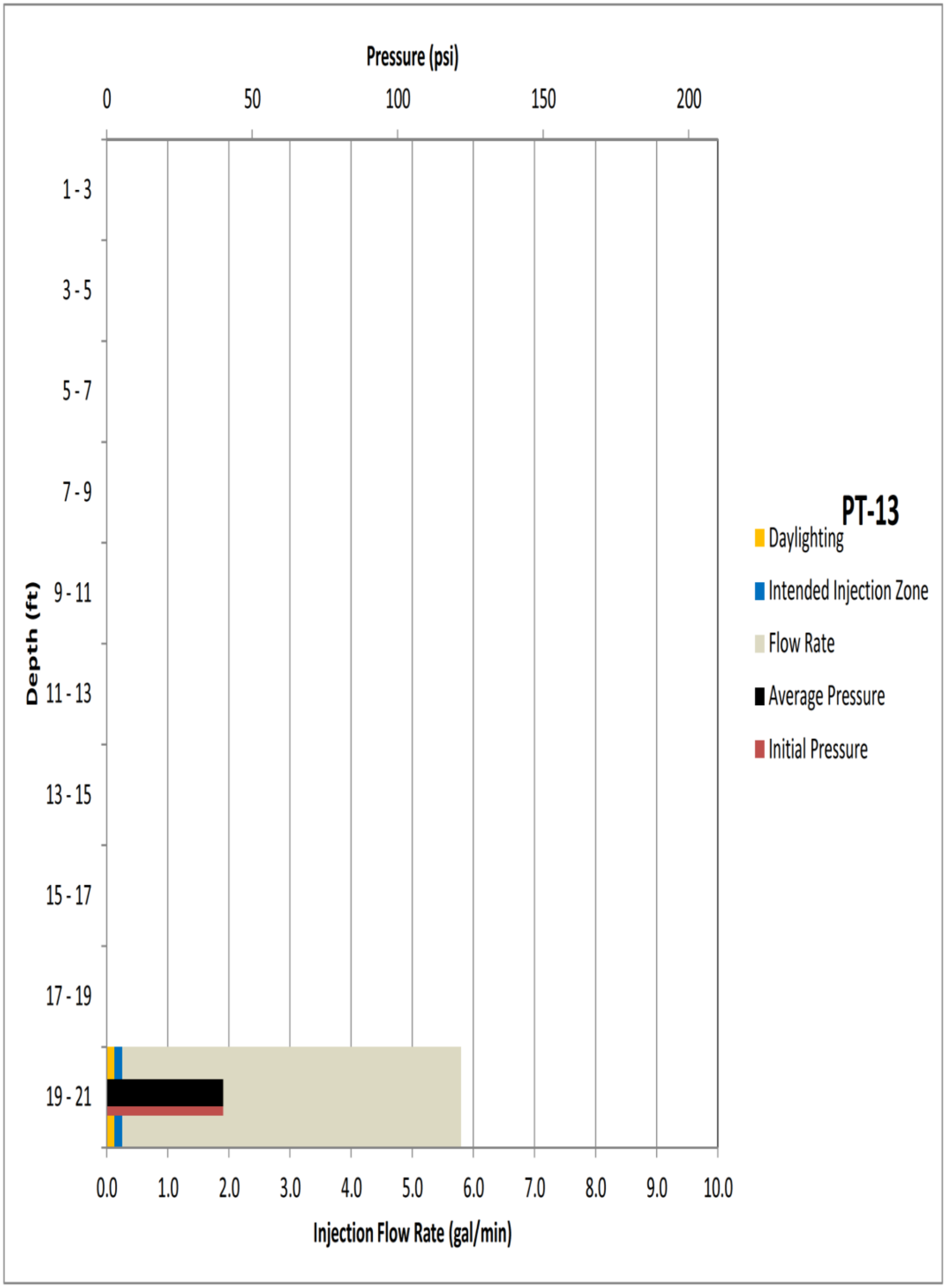




Note:
Borehole log on left is for adjacent TIP 420N/345E.

TITLE:	REAGENT VOLUME INJECTED INTO PT-13 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES		
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida		
TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	LD	PT-13d
	PROJECT #	117-2201329	
	DATE	5-9-14	

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
0						
5		5.2	2	5		
	100	12.7	2	5	SP	
		0.6 0.7	2 2	5 2.5		
		8	2	2.5		
		12	2	2.5		
10		0.8	2	2.5		
		2.3	2	2.5		
	100	1.2	2	2.5	SM	
		0.3	2	2.5		
		0.3	2	2.5		
15		0.7	2	2.5		
		0.2	2	2.5		
		1 2	2 2	2.5 5		
		6.6	2	5	SP	
		6.4	2	2.5		
20					SM	



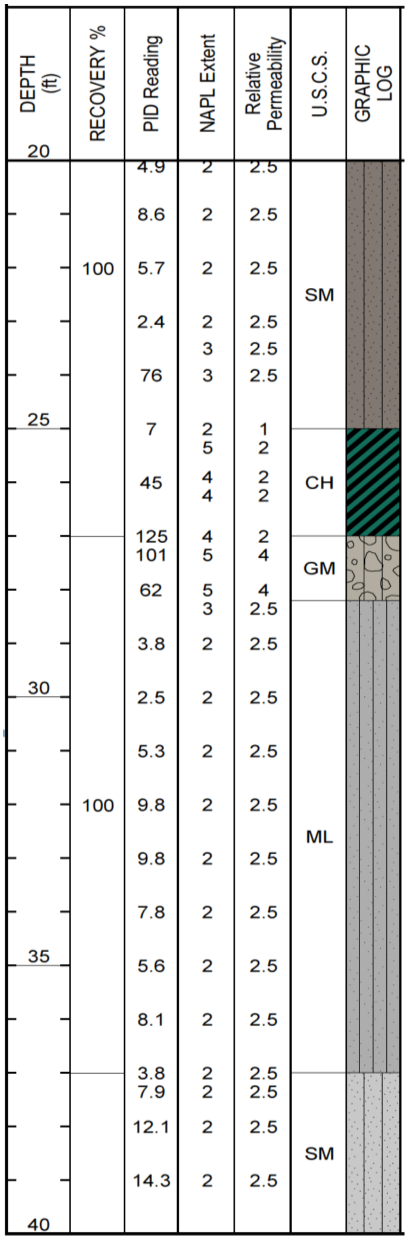
TITLE: **REAGENT FLOW RATE FOR PT-13 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

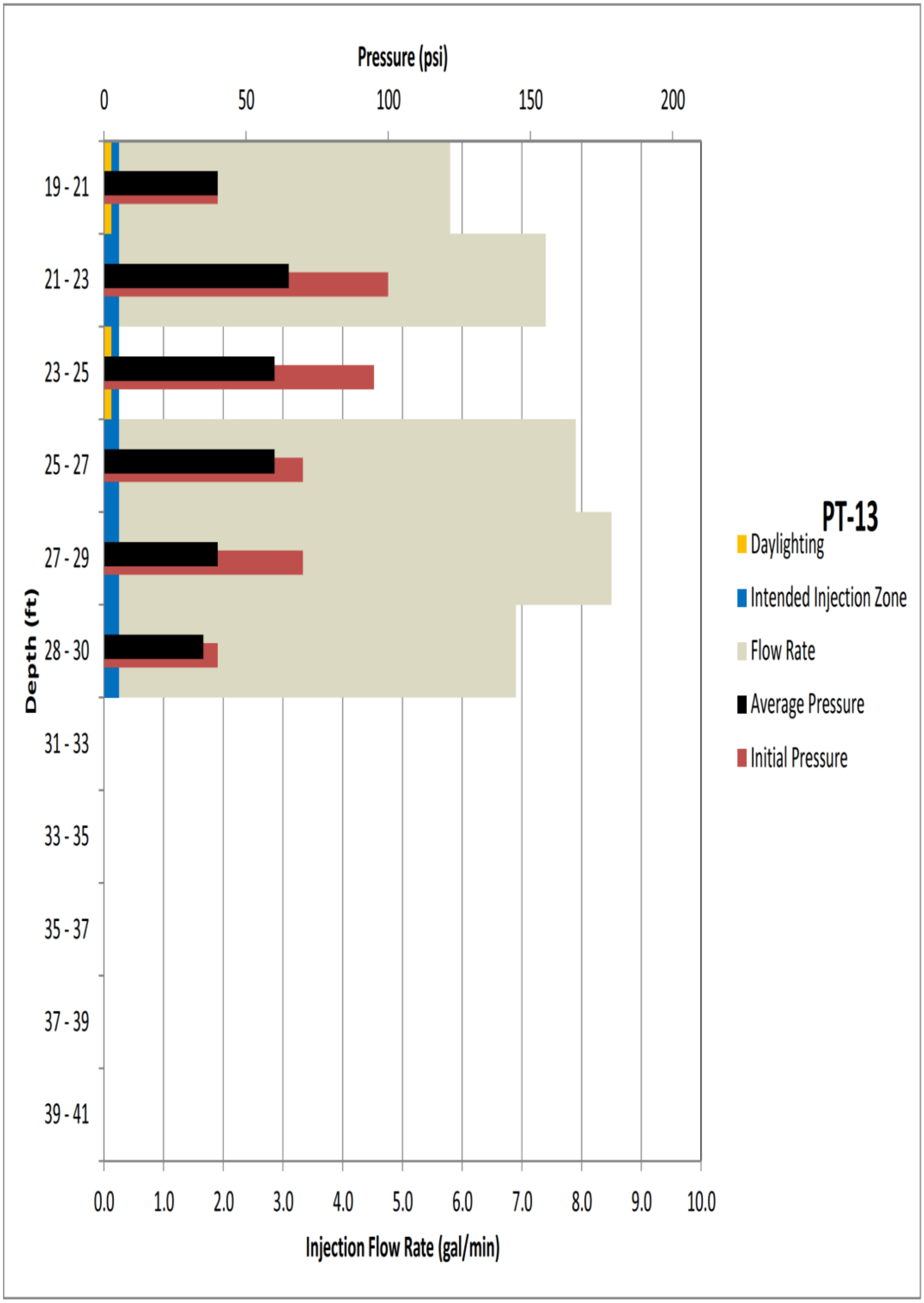
LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-13e**
PROJECT #	117-2201329	
DATE	5-9-14	

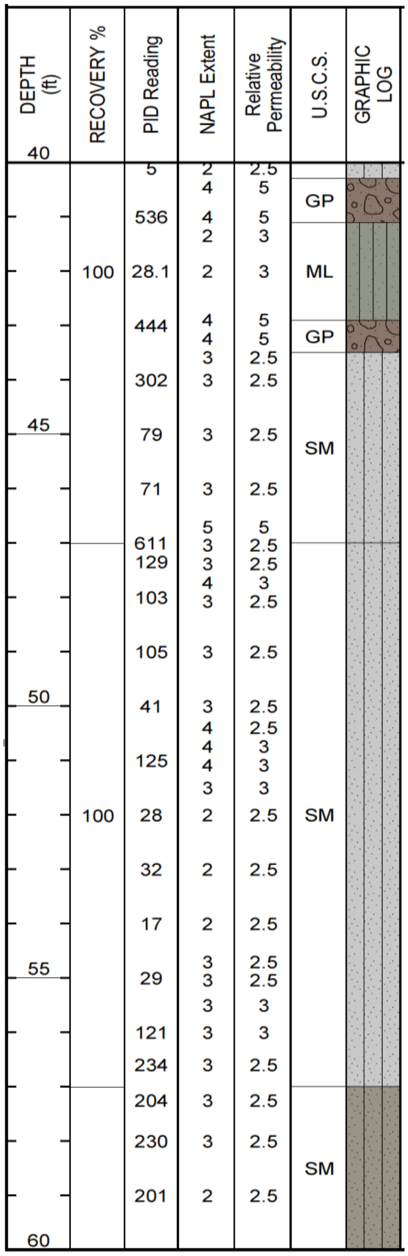
Note:
Borehole log on left is for adjacent TIP 420N/345E.

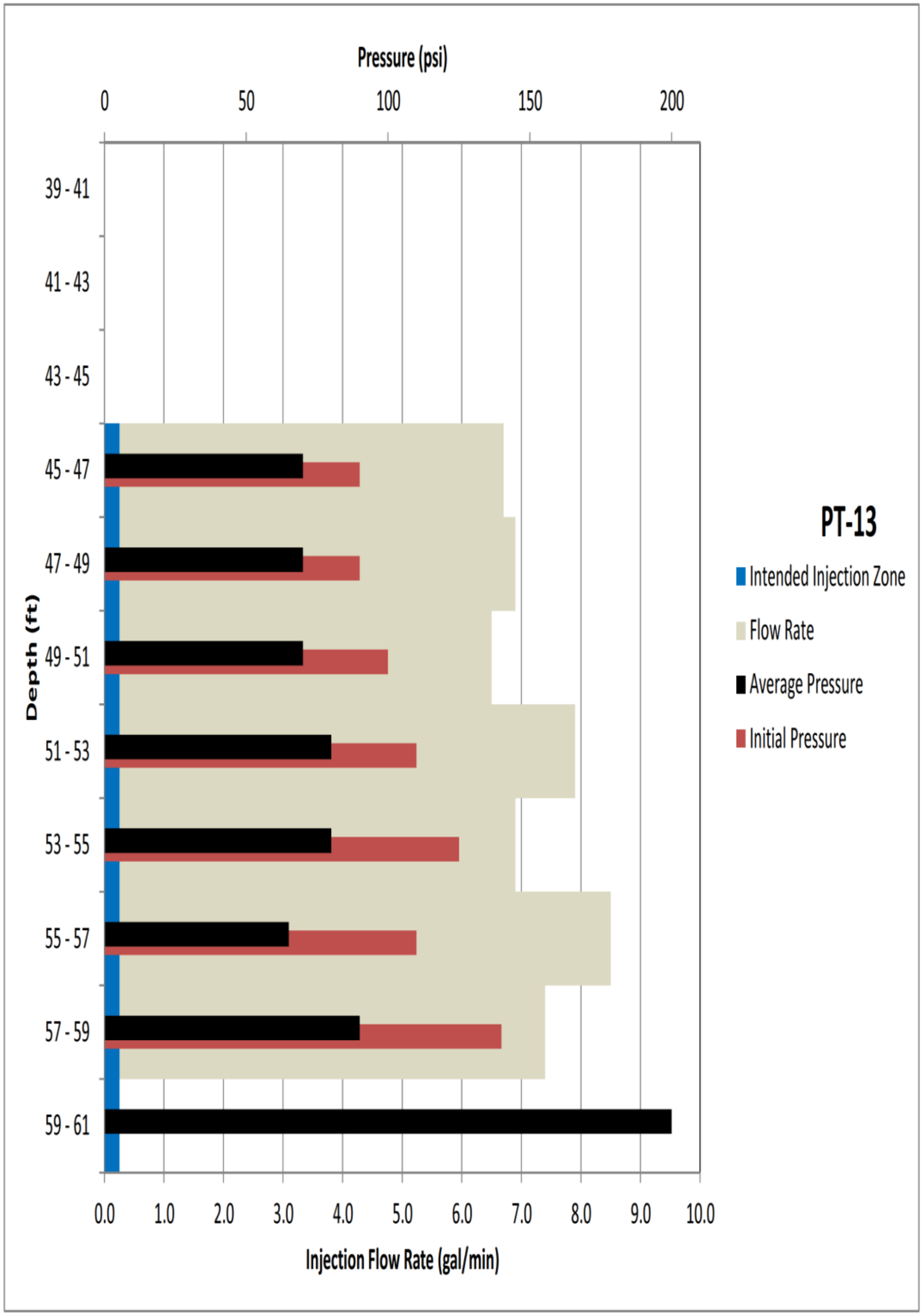




Note:
Borehole log on left is for adjacent TIP 420N/345E.

TITLE:	REAGENT FLOW RATE FOR PT-13 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES			
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida			
TETRA TECH	APPROVED	JE	FIGURE	
	DRAFTED	LD		
	PROJECT #	117-2201329	PT-13f	
	DATE	5-9-14		





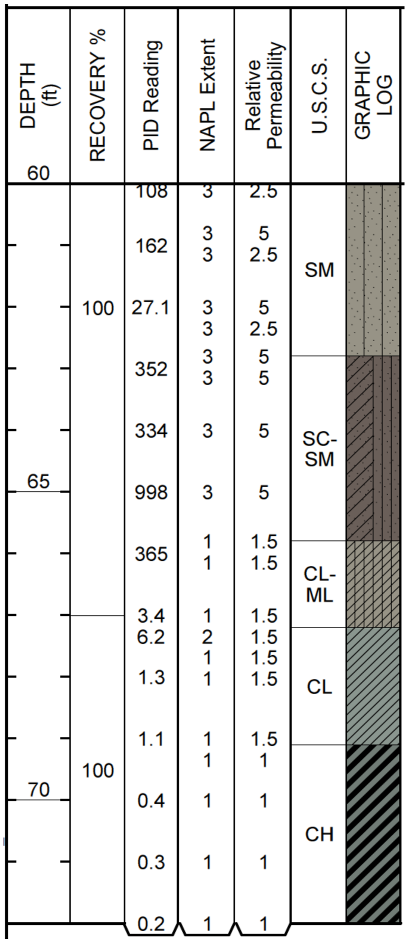
TITLE:
REAGENT FLOW RATE FOR PT-13
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

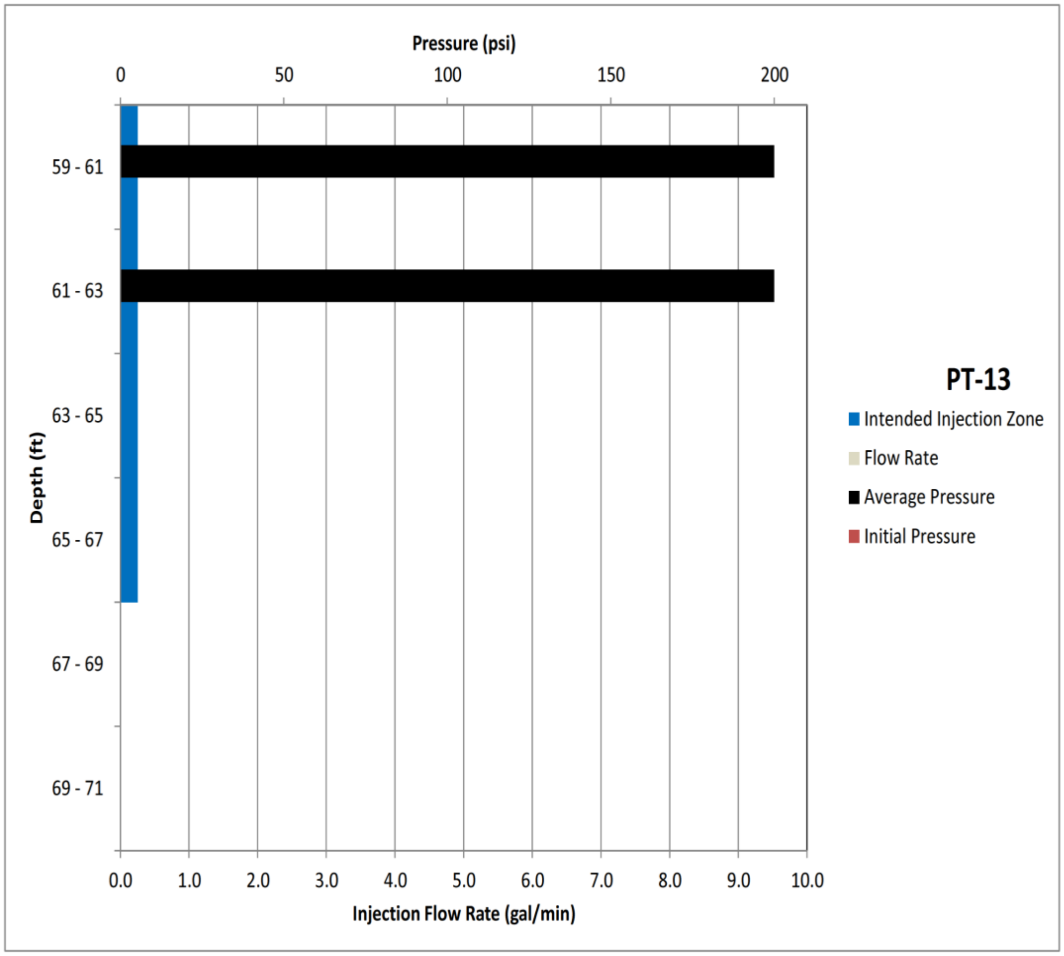
LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	
PROJECT #	117-2201329	**PT-13g**
DATE	5-9-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.



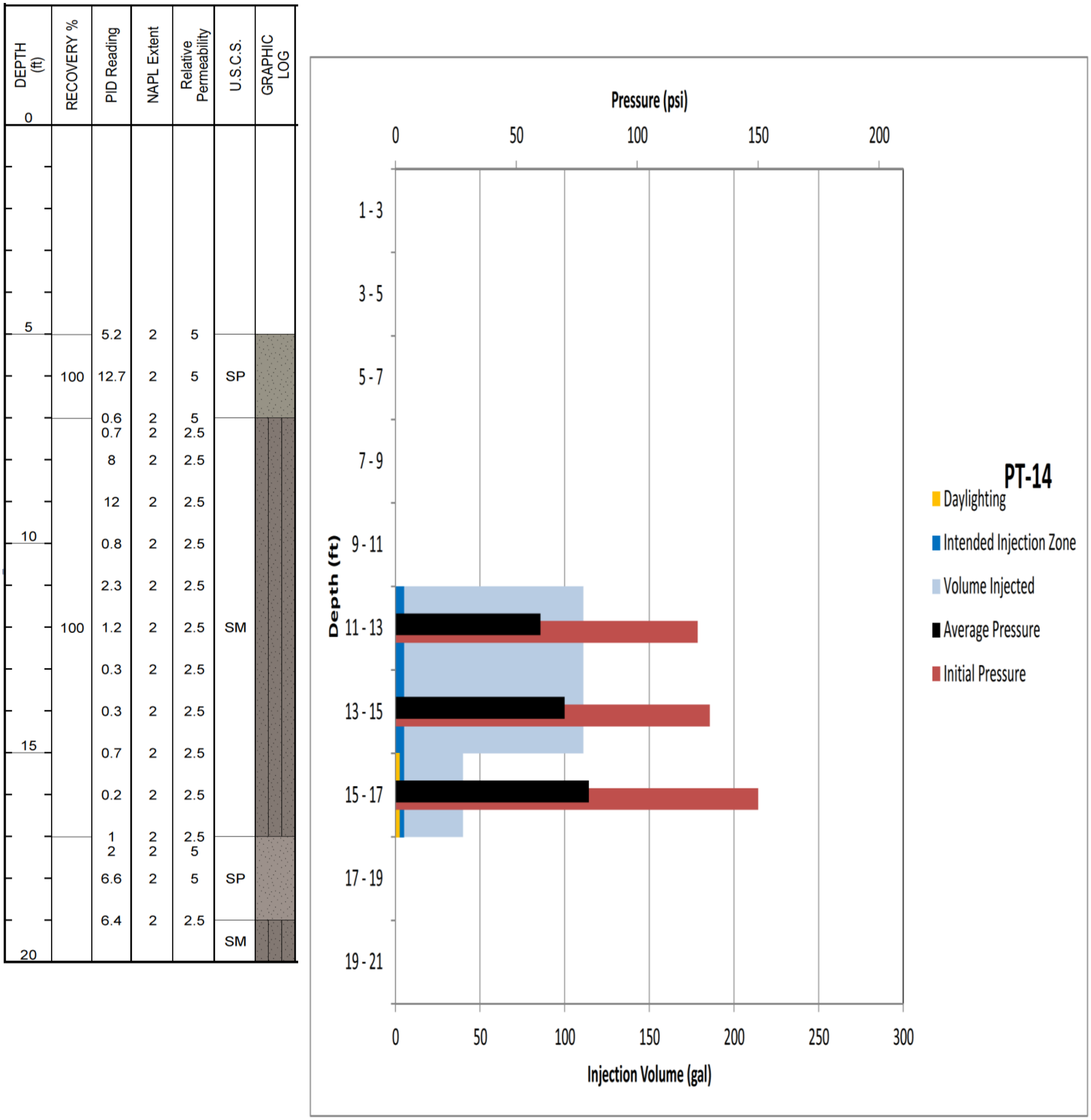


Note:
Borehole log on left is for adjacent TIP 420N/345E.

TITLE:	REAGENT FLOW RATE FOR PT-13 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	PT-13h
PROJECT #	117-2201329	
DATE	5-9-14	



TITLE:

REAGENT VOLUME INJECTED INTO PT-14
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:

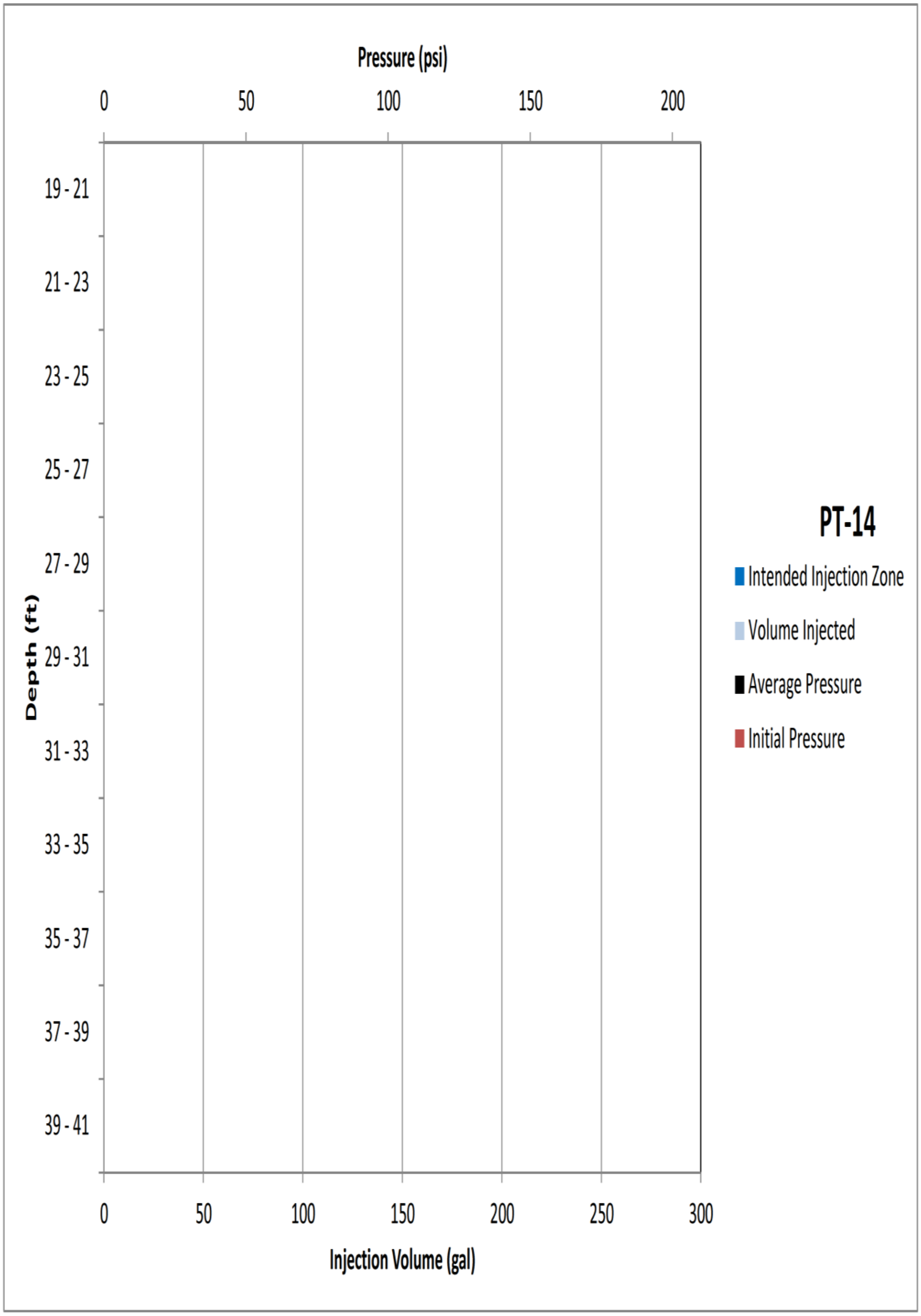
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-14a**
PROJECT #	117-2201329	
DATE	5-9-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
20		4.9	2	2.5		
		8.6	2	2.5		
	100	5.7	2	2.5	SM	
		2.4	2	2.5		
			3	2.5		
		76	3	2.5		
25		7	2 5	1 2		
		45	4 4	2 2	CH	
		125 101	4 5	2 4		
		62	5 3	4 2.5	GM	
		3.8	2	2.5		
30		2.5	2	2.5		
		5.3	2	2.5		
	100	9.8	2	2.5		
		9.8	2	2.5	ML	
		7.8	2	2.5		
35		5.6	2	2.5		
		8.1	2	2.5		
		3.8 7.9	2 2	2.5 2.5		
		12.1	2	2.5	SM	
		14.3	2	2.5		
40						



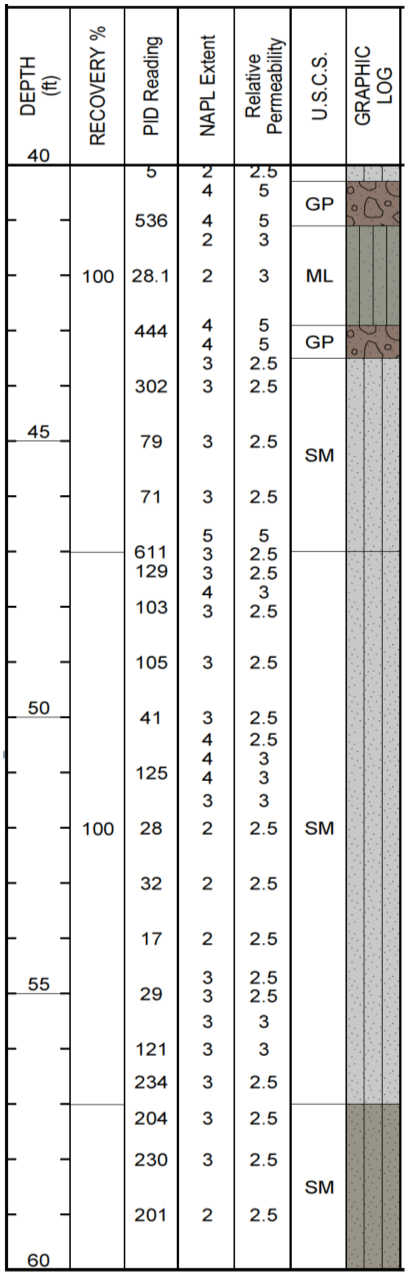
TITLE: **REAGENT VOLUME INJECTED INTO PT-14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

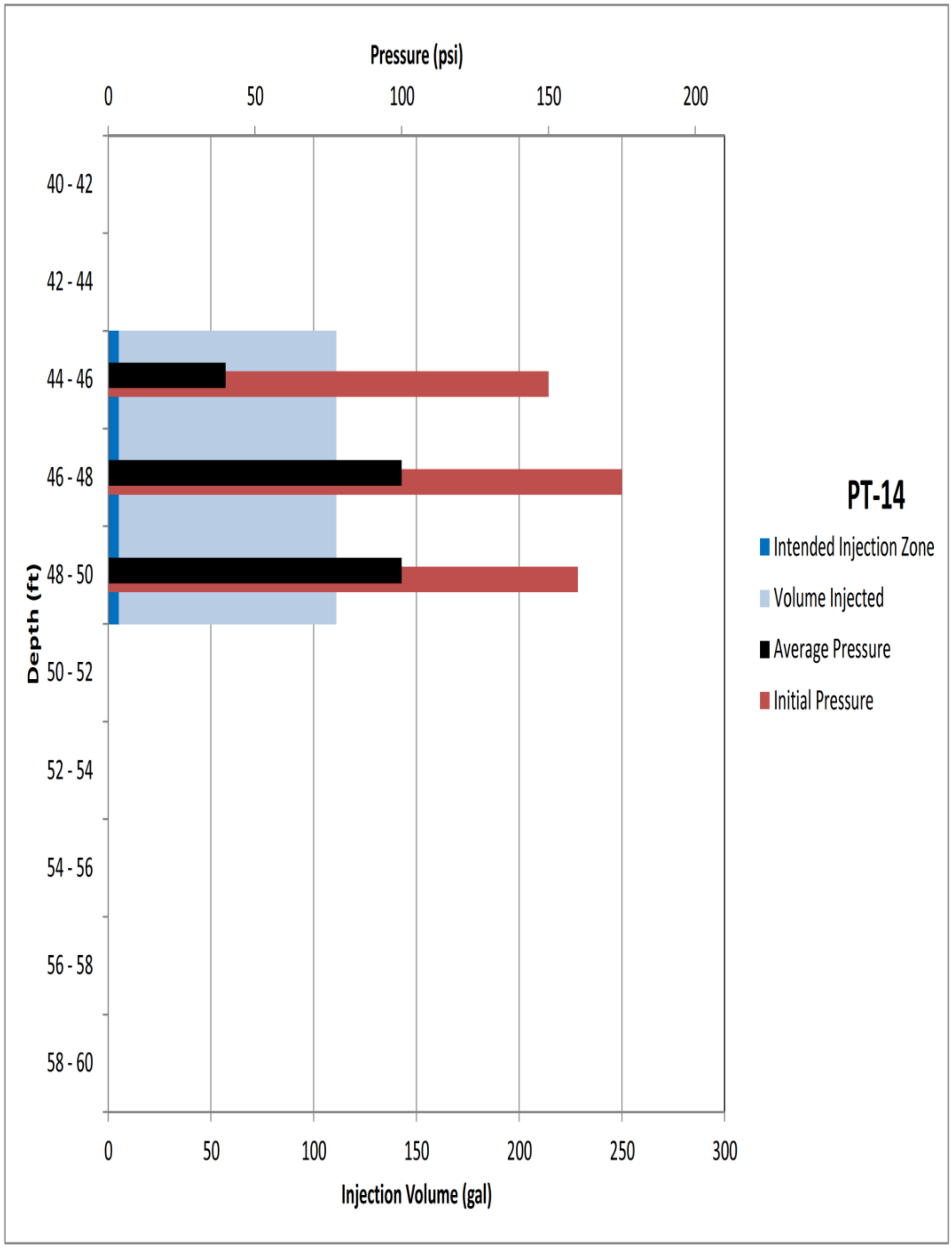
LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE	
DRAFTED	LD		
PROJECT #	117-2201329	**PT-14b**	
DATE	5-9-14		

Note:
Borehole log on left is for adjacent TIP 420N/345E.





TITLE:

REAGENT VOLUME INJECTED INTO PT-14
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

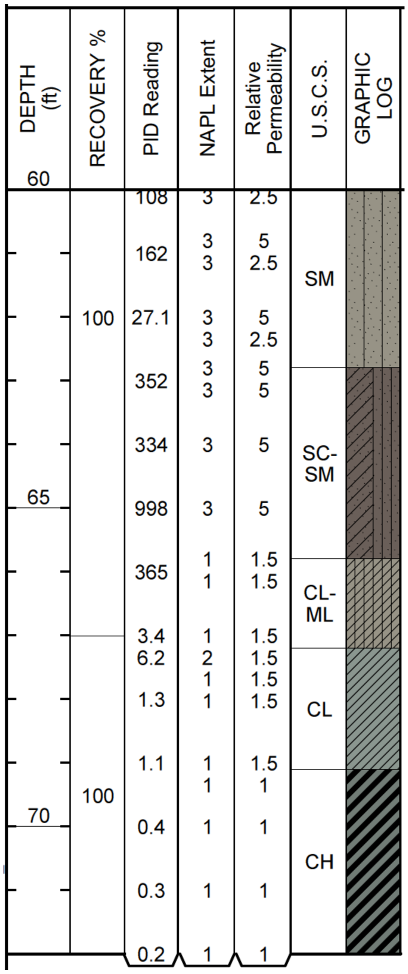
LOCATION:

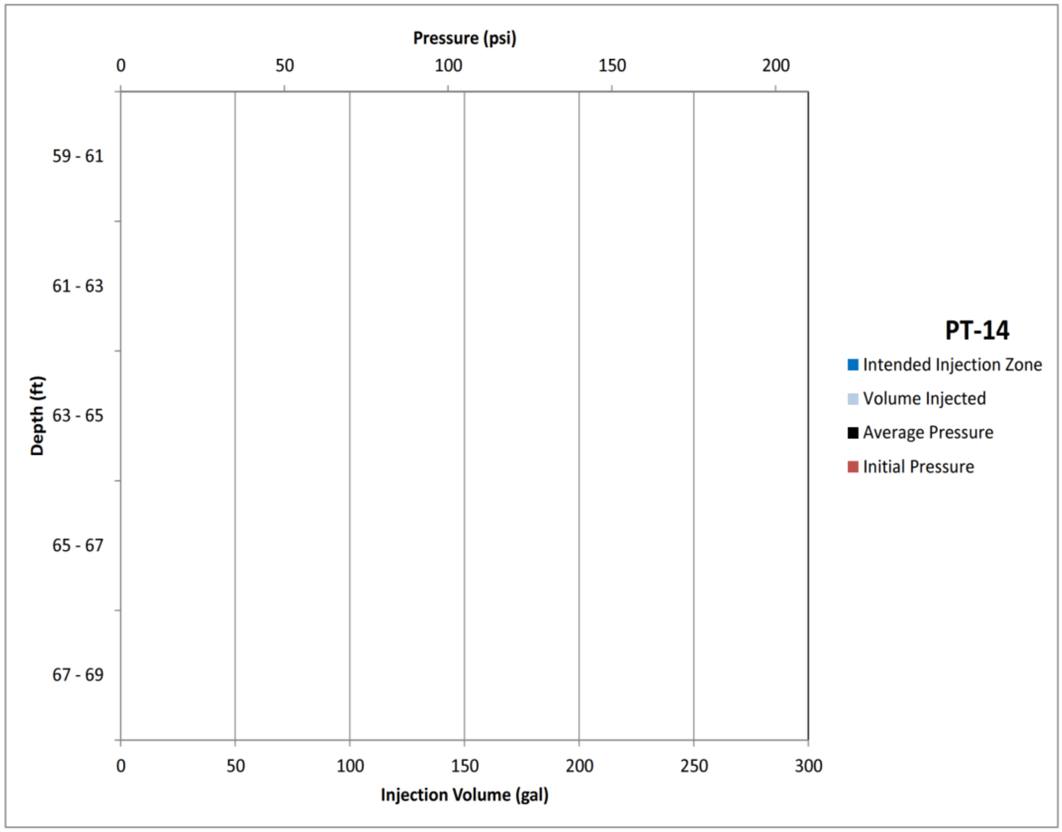
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-14c**
PROJECT #	117-2201329	
DATE	5-9-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.





Note:
Borehole log on left is for adjacent TIP 420N/345E.

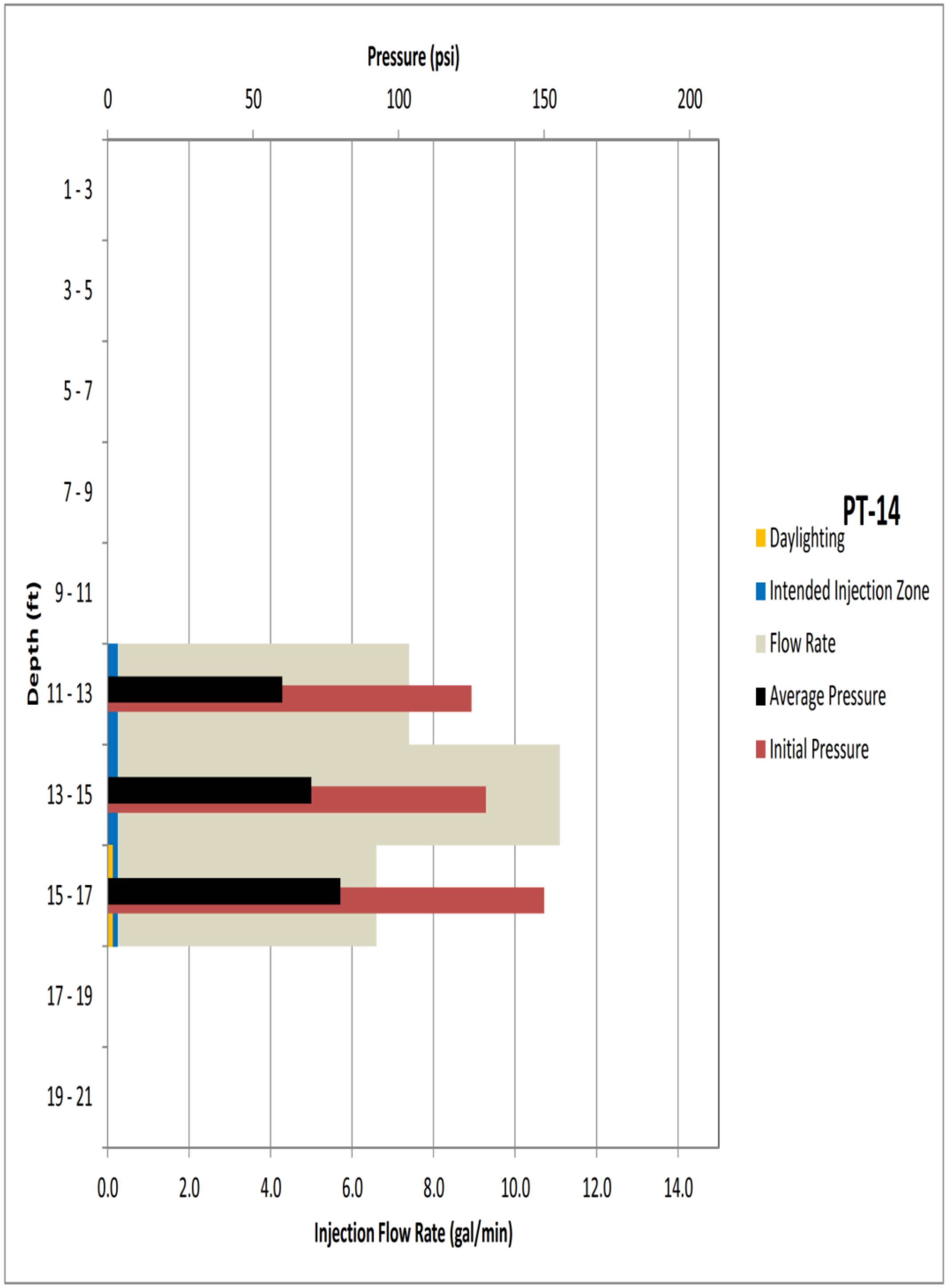
TITLE:
REAGENT VOLUME INJECTED INTO PT-14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-14d**
PROJECT #	117-2201329	
DATE	5-9-14	

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
0						
5		5.2	2	5		
	100	12.7	2	5	SP	
		0.6 0.7	2 2	5 2.5		
		8	2	2.5		
		12	2	2.5		
10		0.8	2	2.5		
		2.3	2	2.5		
	100	1.2	2	2.5	SM	
		0.3	2	2.5		
		0.3	2	2.5		
15		0.7	2	2.5		
		0.2	2	2.5		
		1 2	2 2	2.5 5		
		6.6	2	5	SP	
		6.4	2	2.5		
20					SM	



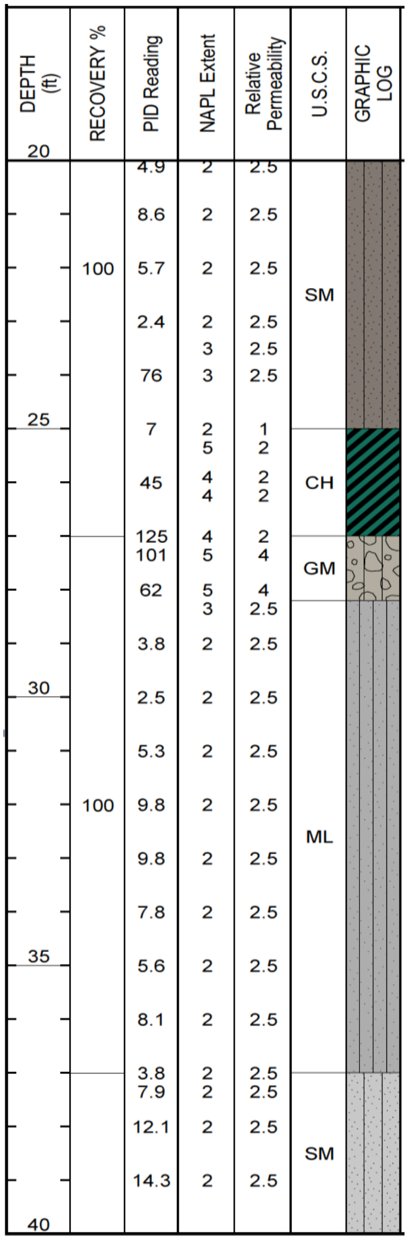
TITLE:
REAGENT FLOW RATE FOR PT-14
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

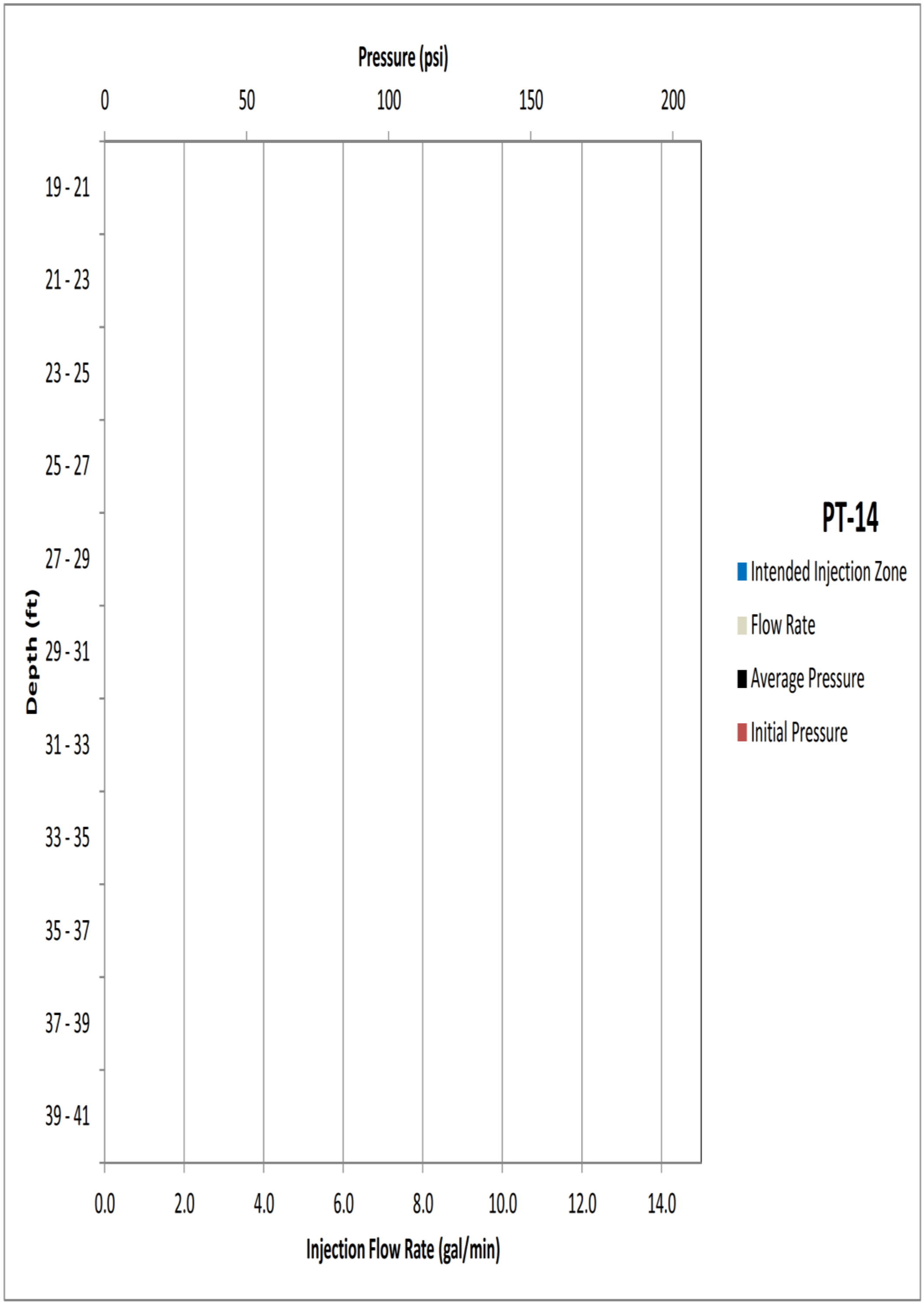
LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-14e**
PROJECT #	117-2201329	
DATE	5-9-14	

Note:
Borehole log on left is for adjacent TIP 420N/345E.





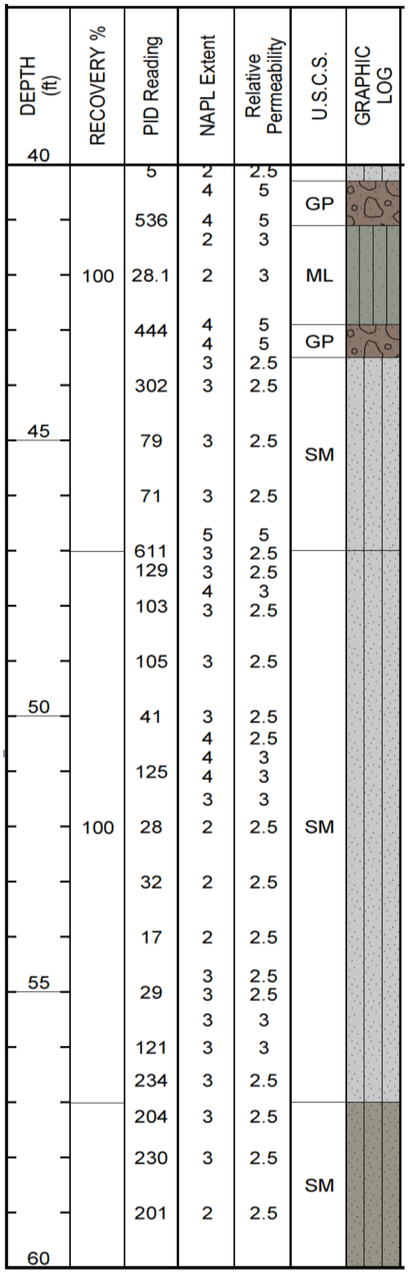
Note:
Borehole log on left is for adjacent TIP 420N/345E.

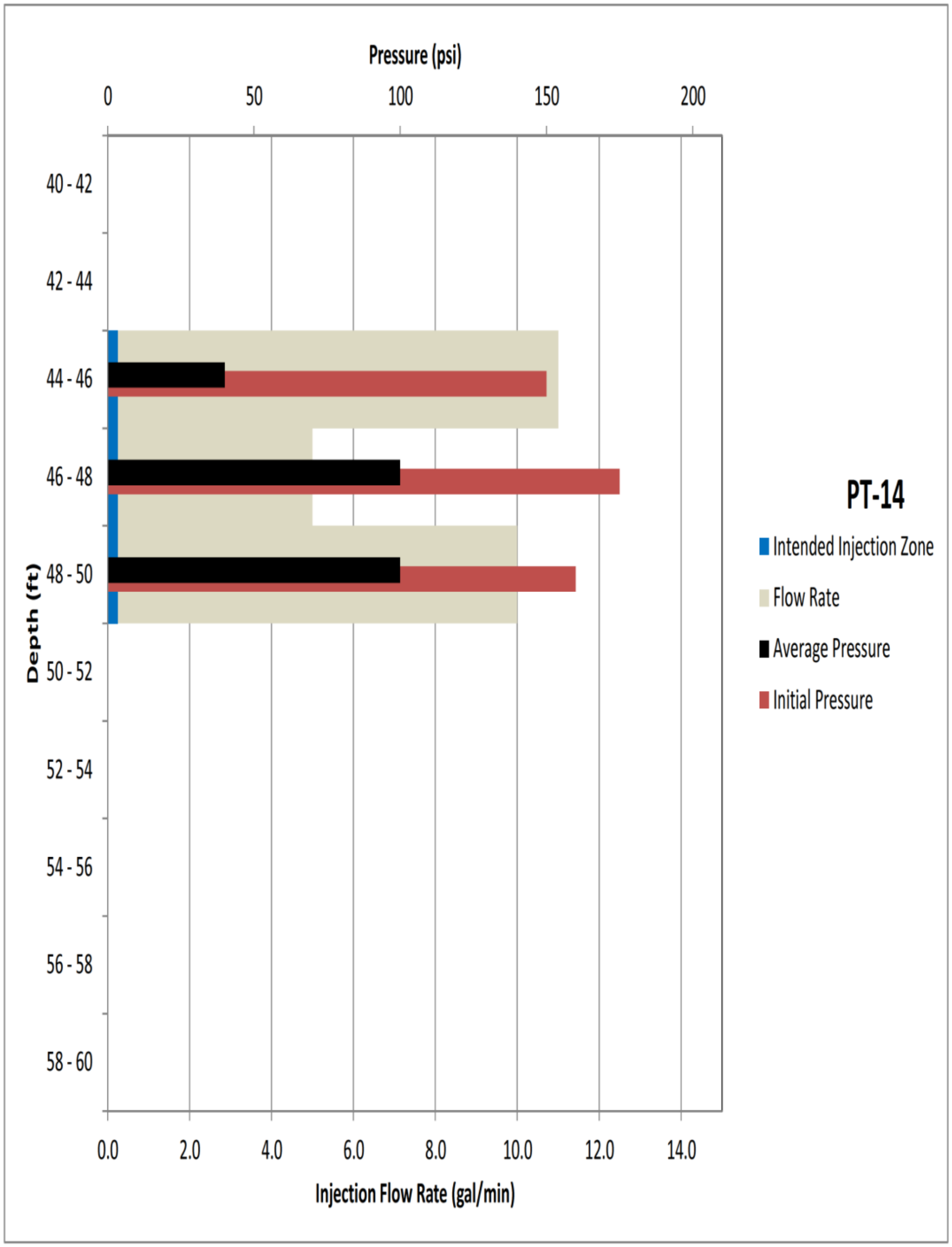
TITLE:
REAGENT FLOW RATE FOR PT-14
WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**PT-14f**
PROJECT #	117-2201329	
DATE	5-9-14	



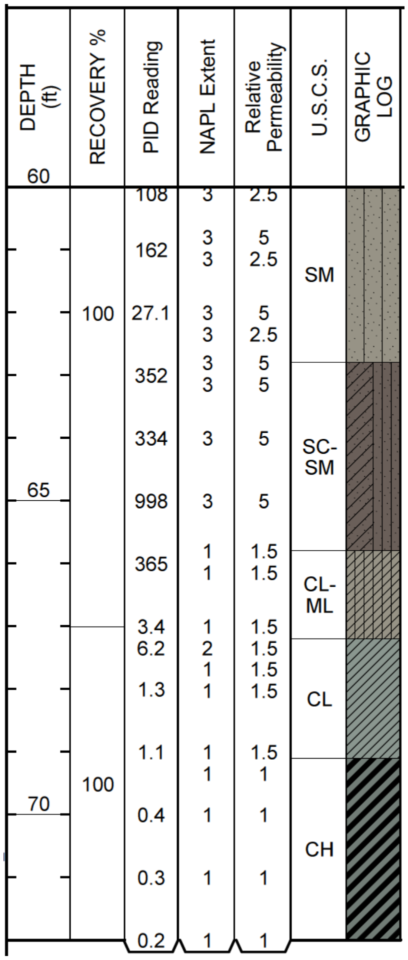


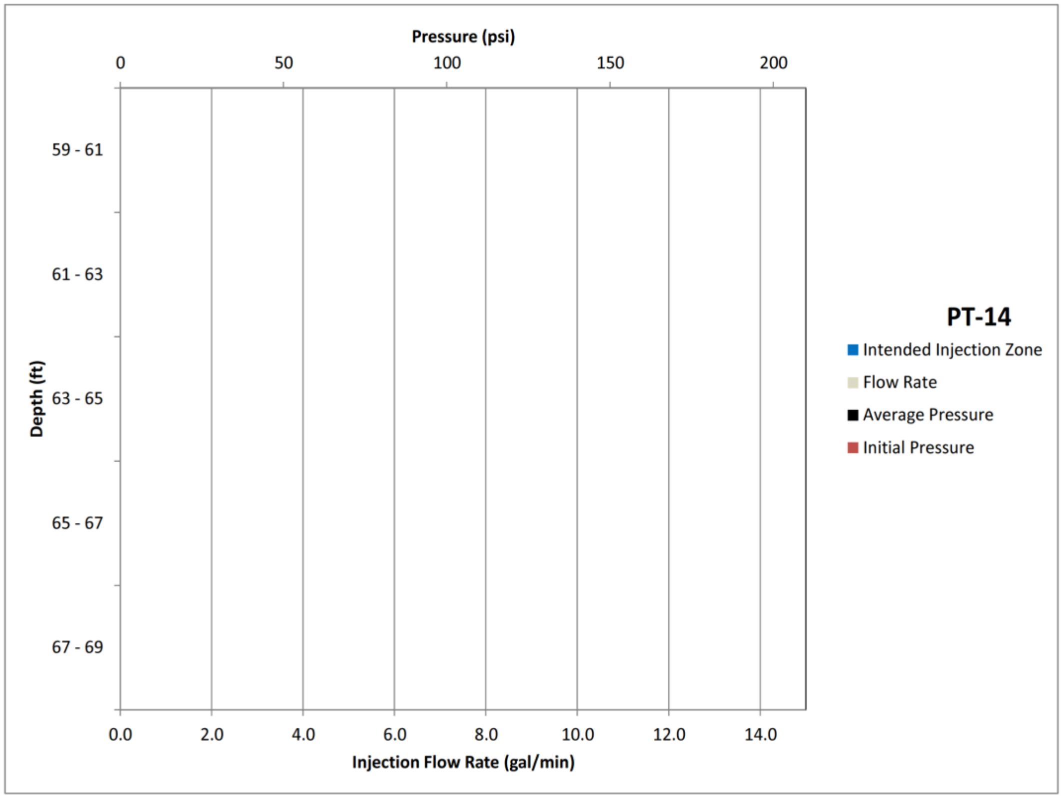
Note:
Borehole log on left is for adjacent TIP 420N/345E.

TITLE:	REAGENT FLOW RATE FOR PT-14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida

TETRA TECH

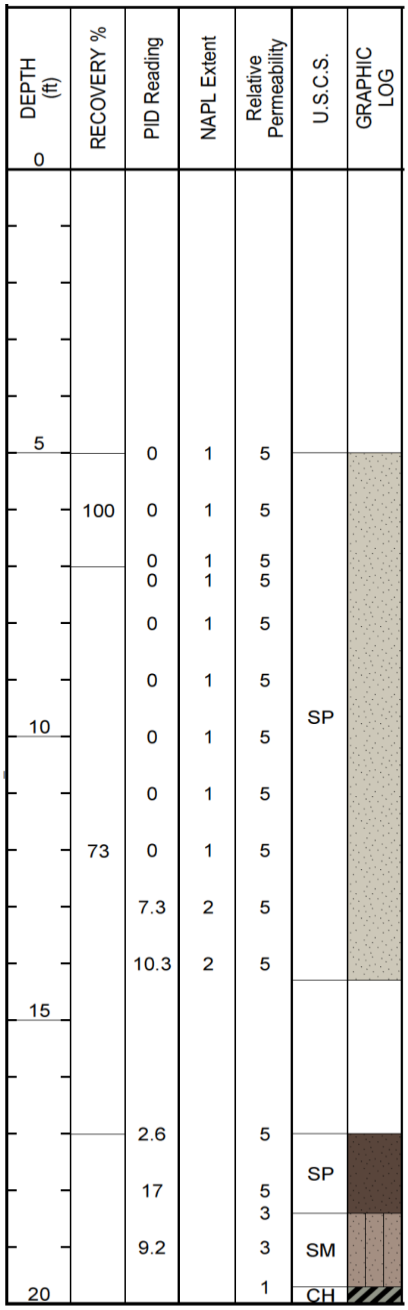
APPROVED	JE	FIGURE
DRAFTED	LD	PT-14g
PROJECT #	117-2201329	
DATE	5-9-14	

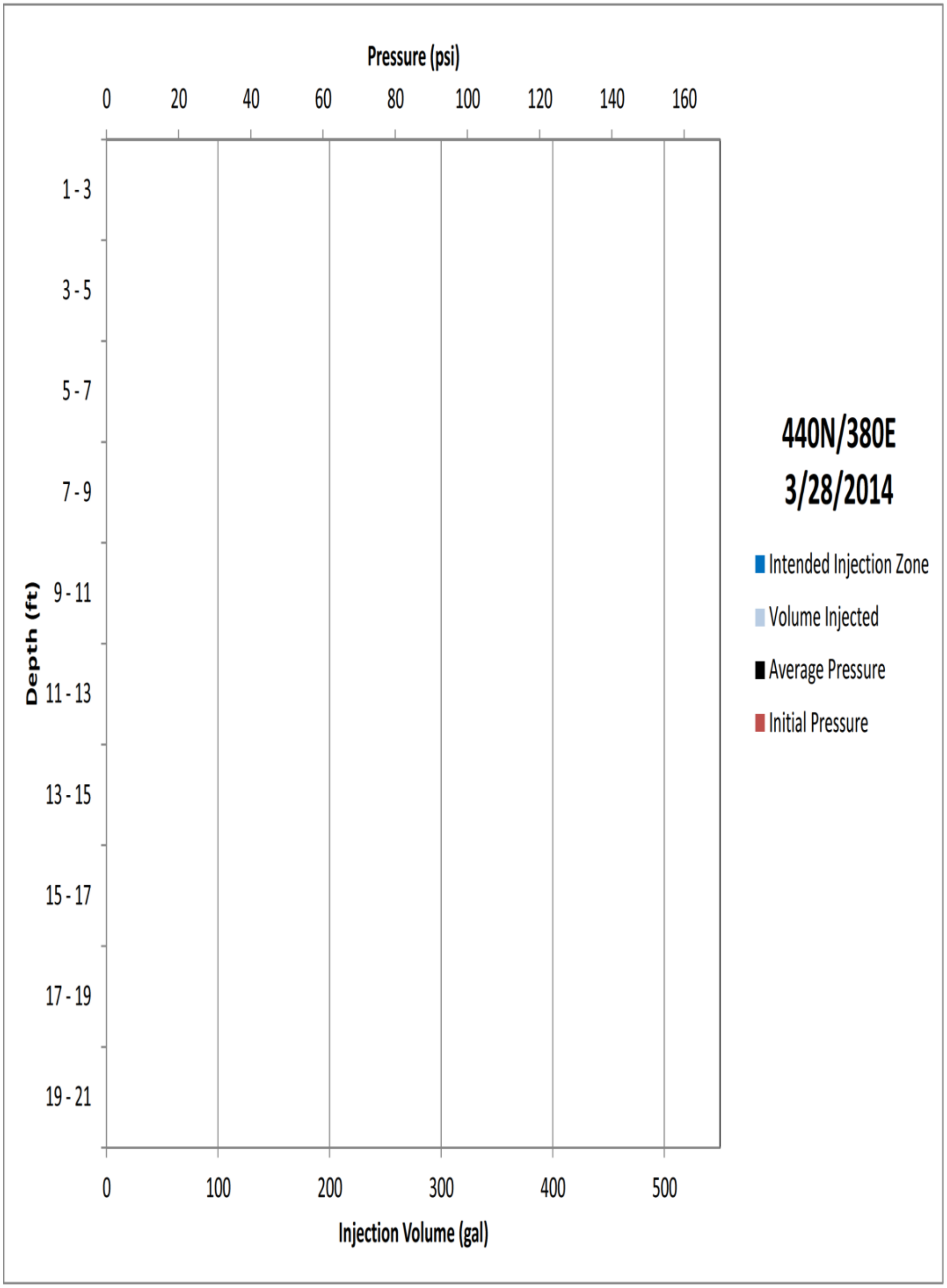




Note:
Borehole log on left is for adjacent TIP 420N/345E.

TITLE:	REAGENT FLOW RATE FOR PT-13 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES		
LOCATION:	Cabot Carbon/Koppers Superfund Site Gainesville, Florida		
TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	LD	PT-14h
	PROJECT #	117-2201329	
	DATE	5-9-14	





TITLE: REAGENT VOLUME INJECTED INTO 440N/380E ON 3/28/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

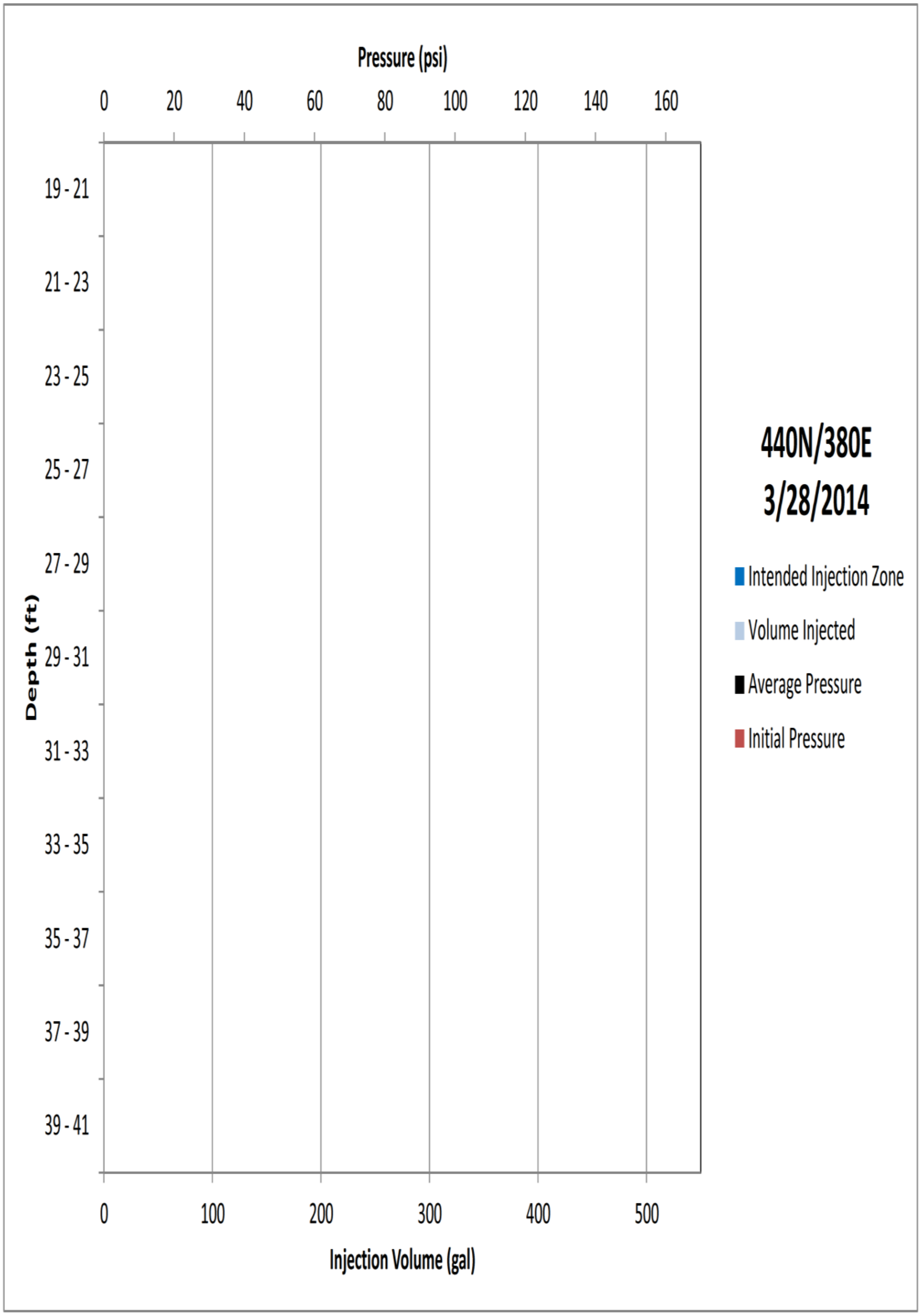
LOCATION: Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	1a
PROJECT #	117-2201329	
DATE	5-9-14	

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.
20		2.7		1	
		1.9		1	CH
	100	1.8	3 3	2 1.5	
		1.4	3	1.5	CL-ML
		0.5	3	1.5	
			2	2	ML
25		5.9	2	3	
		2.6	2	3	GM
		4.2 15.4	2 2	3 2	ML
		18	2 2	2.5 2.5	
		3.6	2	2.5	
30		4.9	2	2.5	
		15.2	2	2.5	
	100	16.1	2	2.5	
		7.9	2	2.5	SM
		7.1	2	2.5	
35		7.4	2	2.5	
		46	2 3	2.5 2	
		18.5 59	3 3	2 2	
		79	3	2	
		164	3	2	ML
40					

GRAPHIC LOG

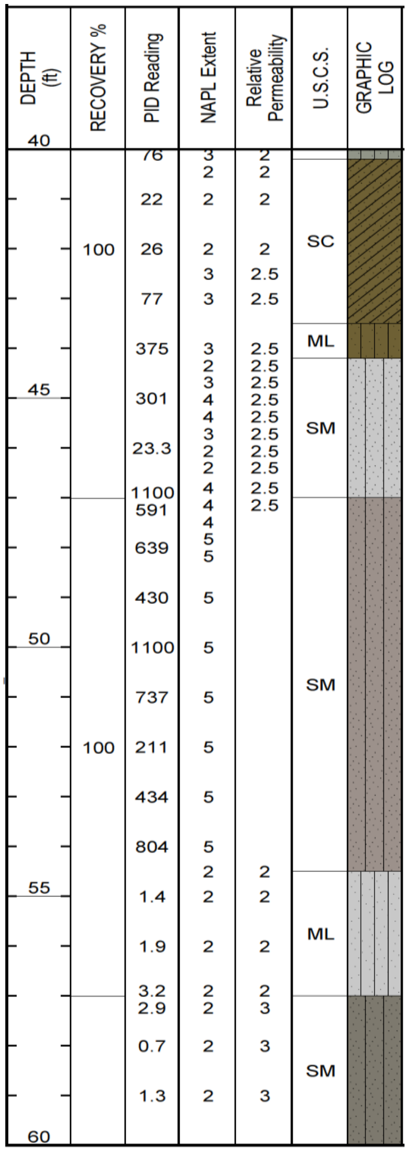


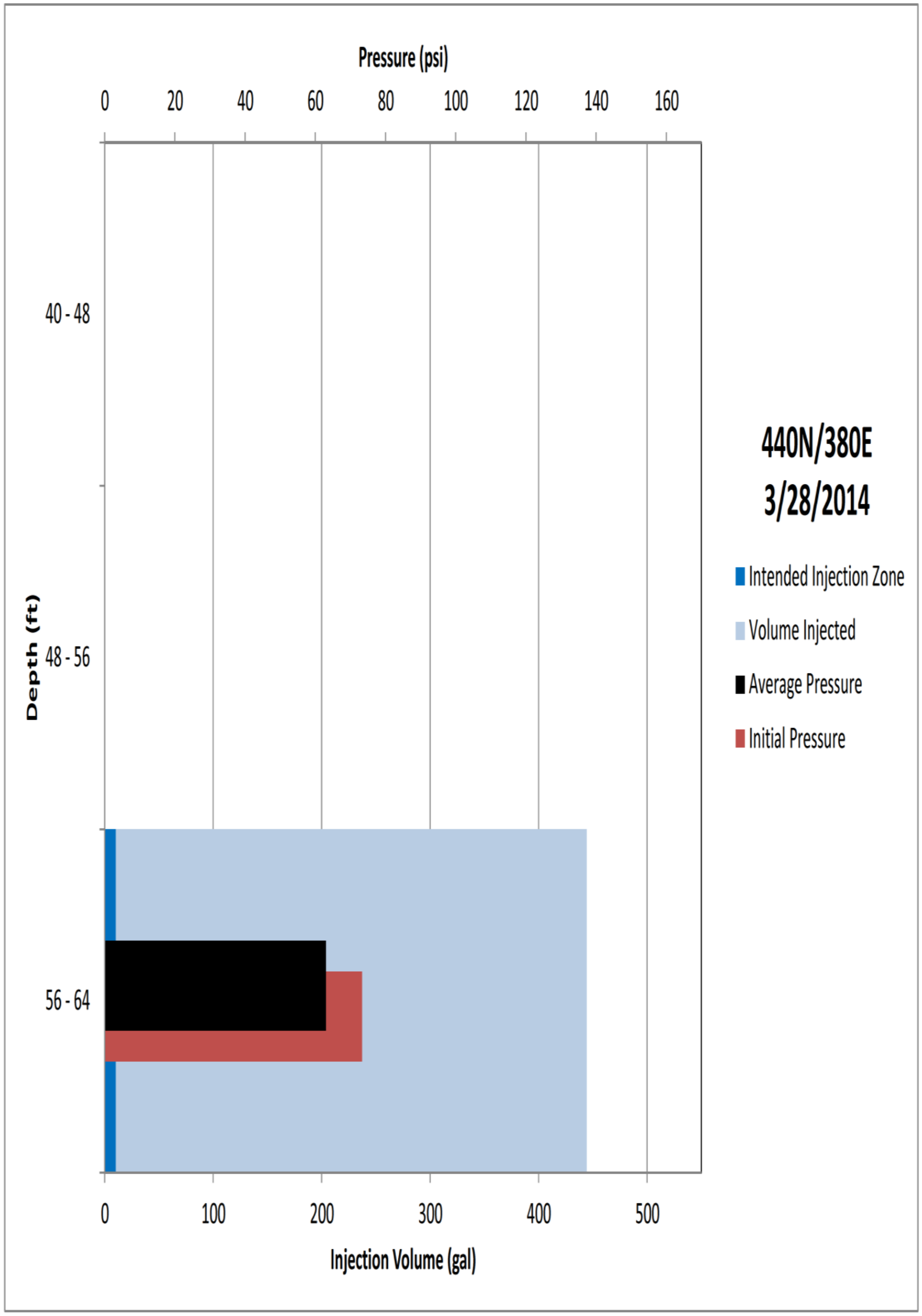
TITLE:
REAGENT VOLUME INJECTED INTO 440N/380E ON 3/28/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION: **Cabot Carbon/Koppers Superfund Site**
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**1b**
PROJECT #	117-2201329	
DATE	5-9-14	





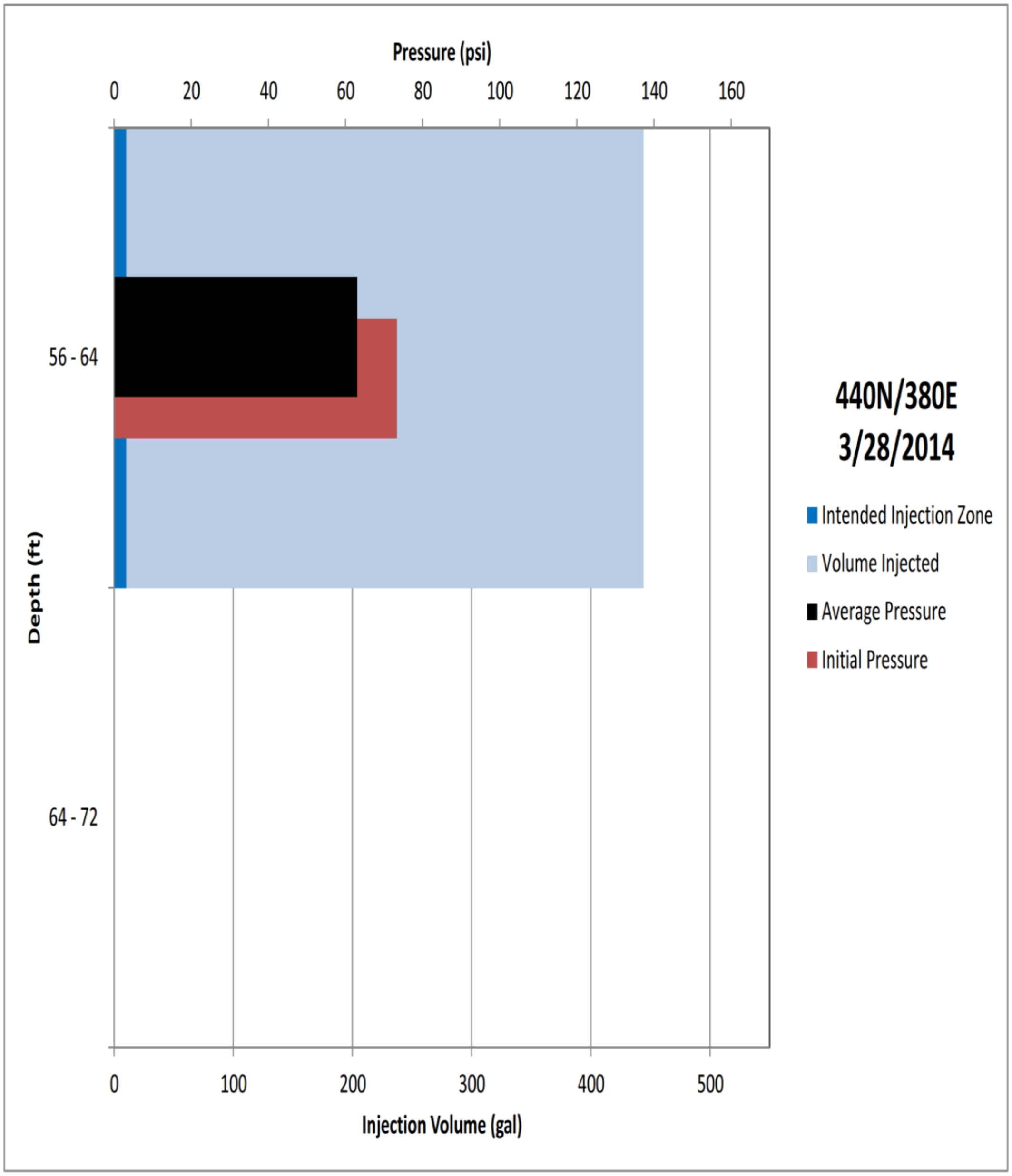
TITLE: REAGENT VOLUME INJECTED INTO 440N/380E ON 3/28/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION: Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	1c
PROJECT #	117-2201329	
DATE	5-9-14	

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
60		1.8	2	3		
		0.6	1	3		
	100	0.3	1	3	SM	
		0.3	1	3		
		0	1	3		
65		0	1	3	SC-SM	
		0	1 1	1.5 1.5		
		0 0	1 1	1.5 1.5	CL-ML	
	100	0	1	1.5		
		0	1	1.5		

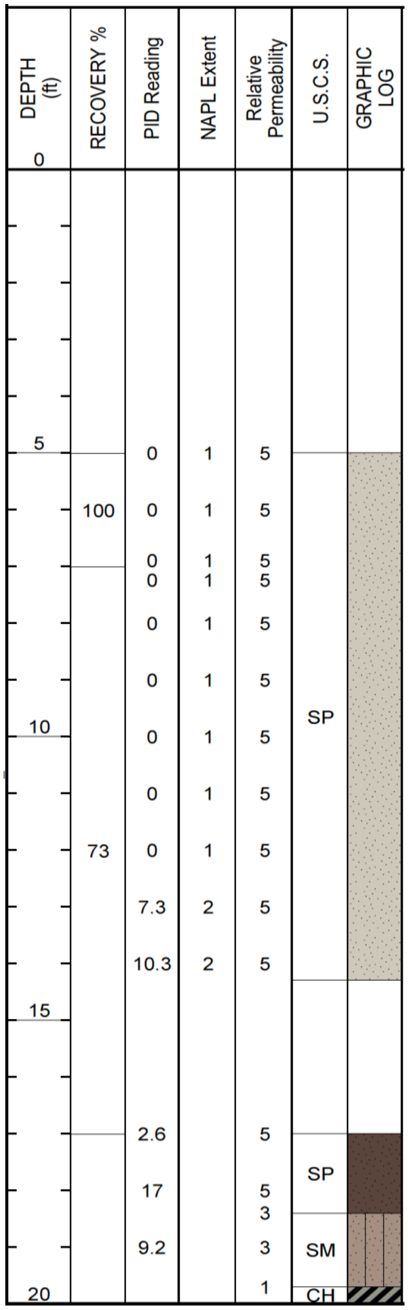


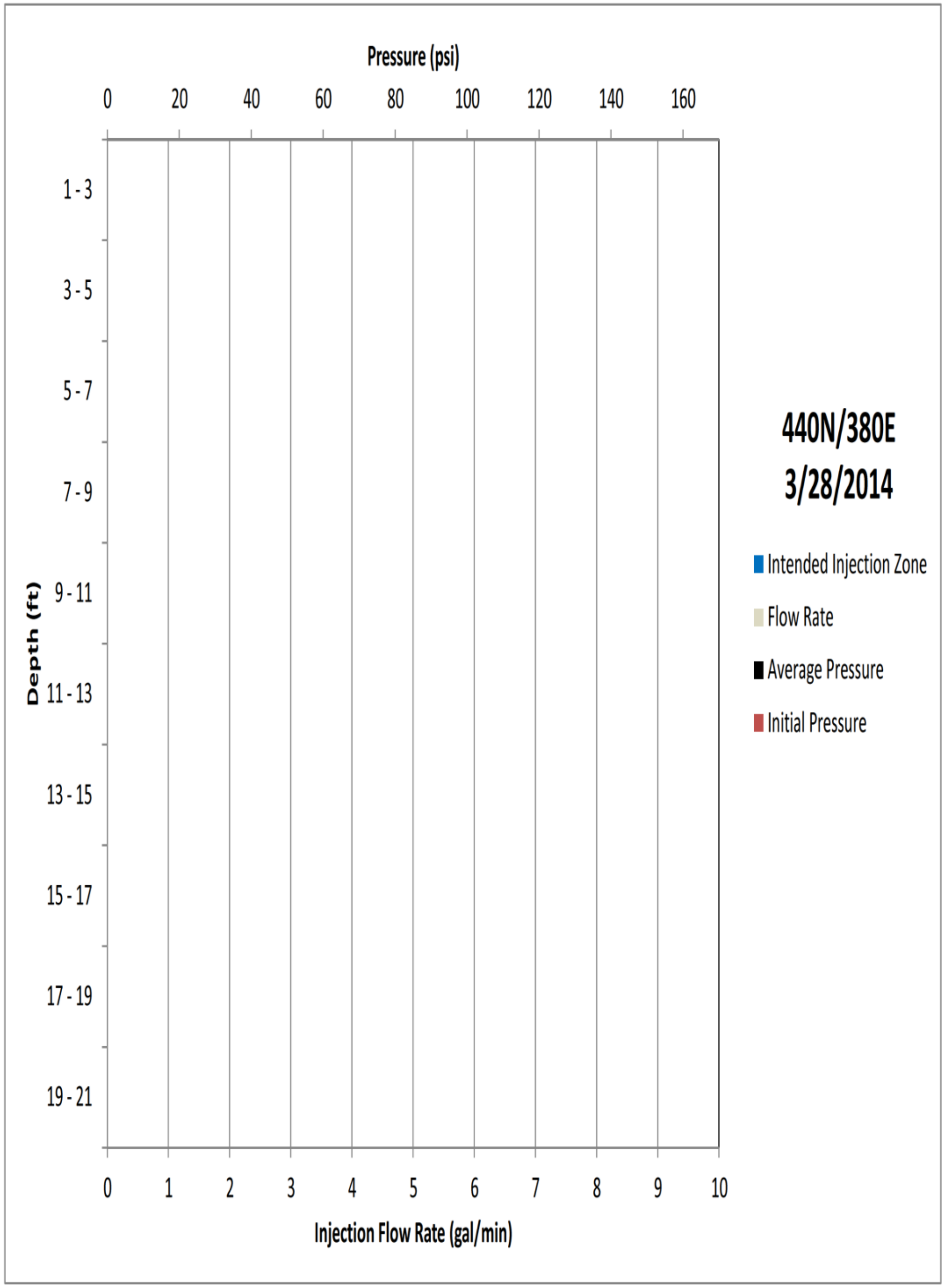
TITLE: REAGENT VOLUME INJECTED INTO 440N/380E ON 3/28/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION: Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

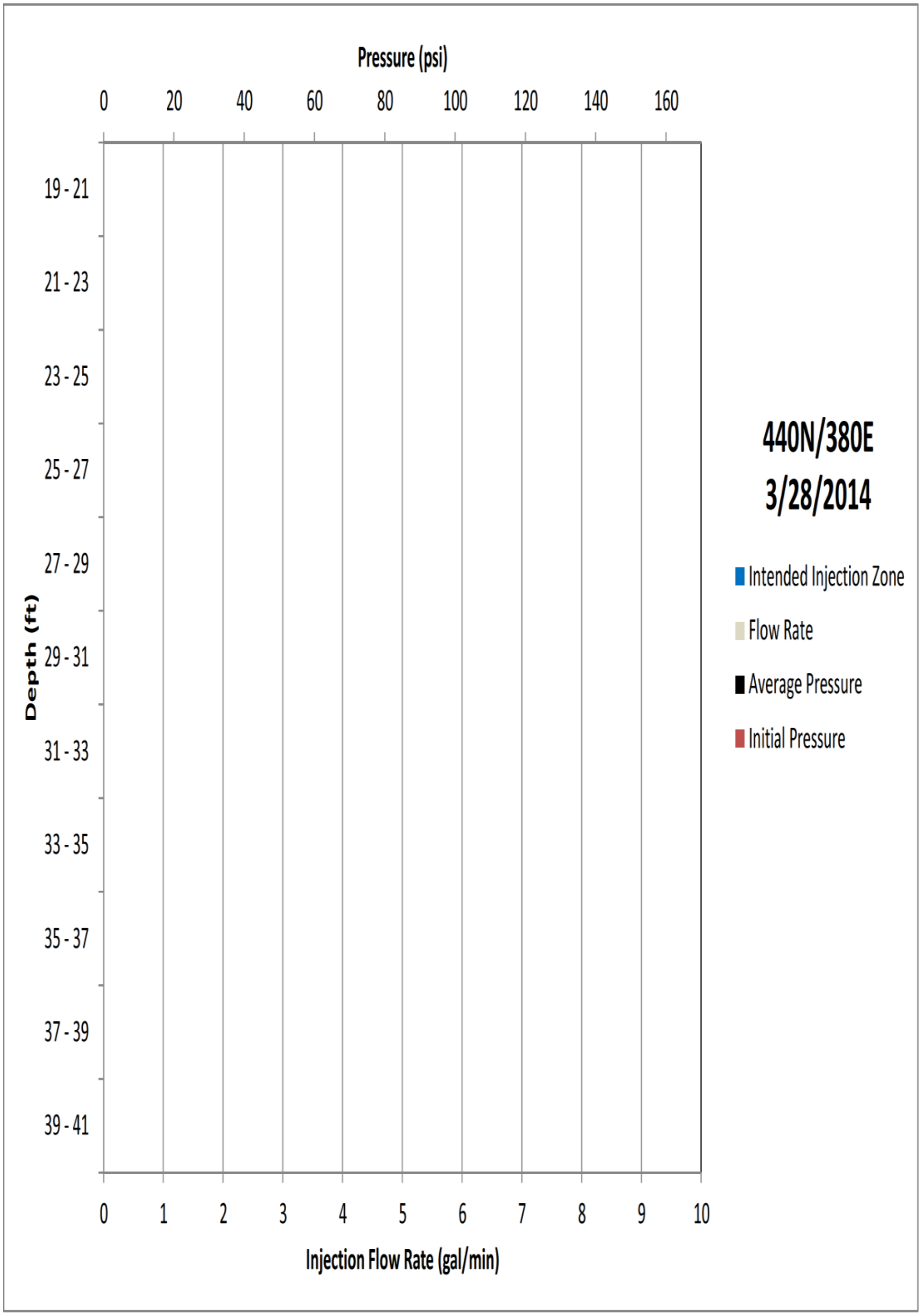
APPROVED	JE	FIGURE
DRAFTED	LD	1d
PROJECT #	117-2201329	
DATE	5-9-14	





TITLE: REAGENT FLOW RATE FOR 440N/380E ON 3/28/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES			
LOCATION: Cabot Carbon/Koppers Superfund Site Gainesville, Florida			
TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	LD	1e
	PROJECT #	117-2201329	
	DATE	5-9-14	

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
20		2.7		1	CH	
		1.9		1		
	100	1.8	3 3	2 1.5		
		1.4	3	1.5	CL-ML	
		0.5	3 2	1.5 2		
25		5.9	2	3	ML	
		2.6	2	3	GM	
		4.2 15.4	2 2	3 2	ML	
		18	2 2	2.5 2.5		
		3.6	2	2.5		
30		4.9	2	2.5		
		15.2	2	2.5		
	100	16.1	2	2.5		
		7.9	2	2.5	SM	
		7.1	2	2.5		
35		7.4	2	2.5		
		46	2 3	2.5 2		
		18.5 59	3 3	2 2		
		79	3	2		
		164	3	2	ML	
40						

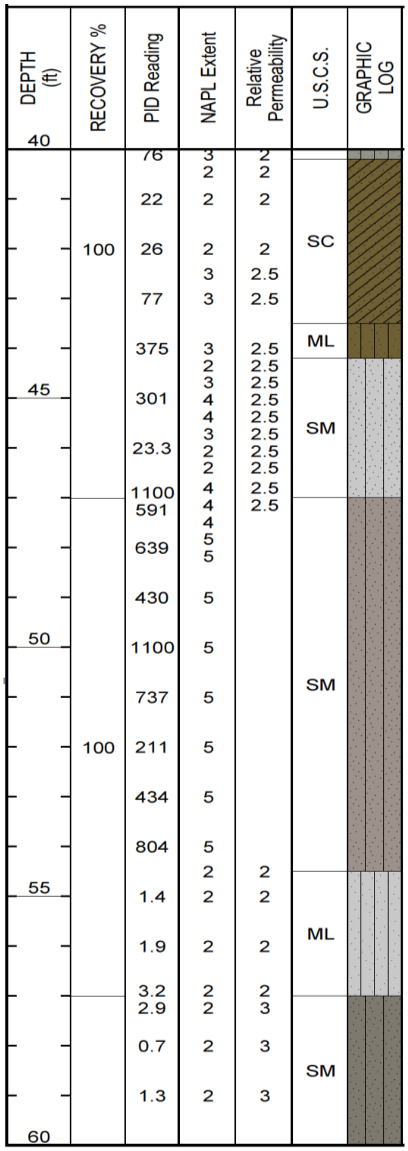


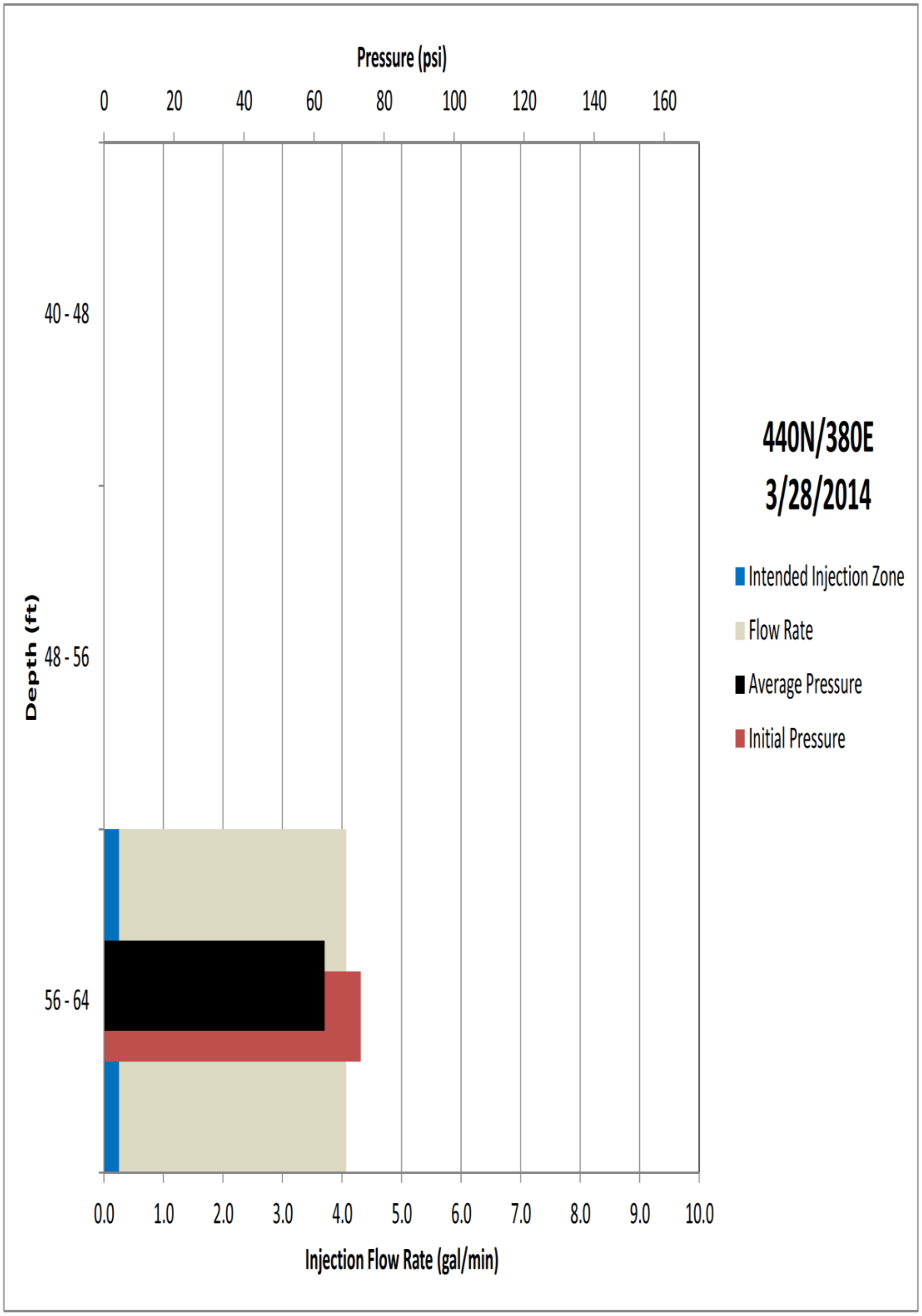
TITLE: **REAGENT FLOW RATE FOR 440N/380E ON 3/28/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

LOCATION: **Cabot Carbon/Koppers Superfund Site**
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**1f**
PROJECT #	117-2201329	
DATE	5-9-14	





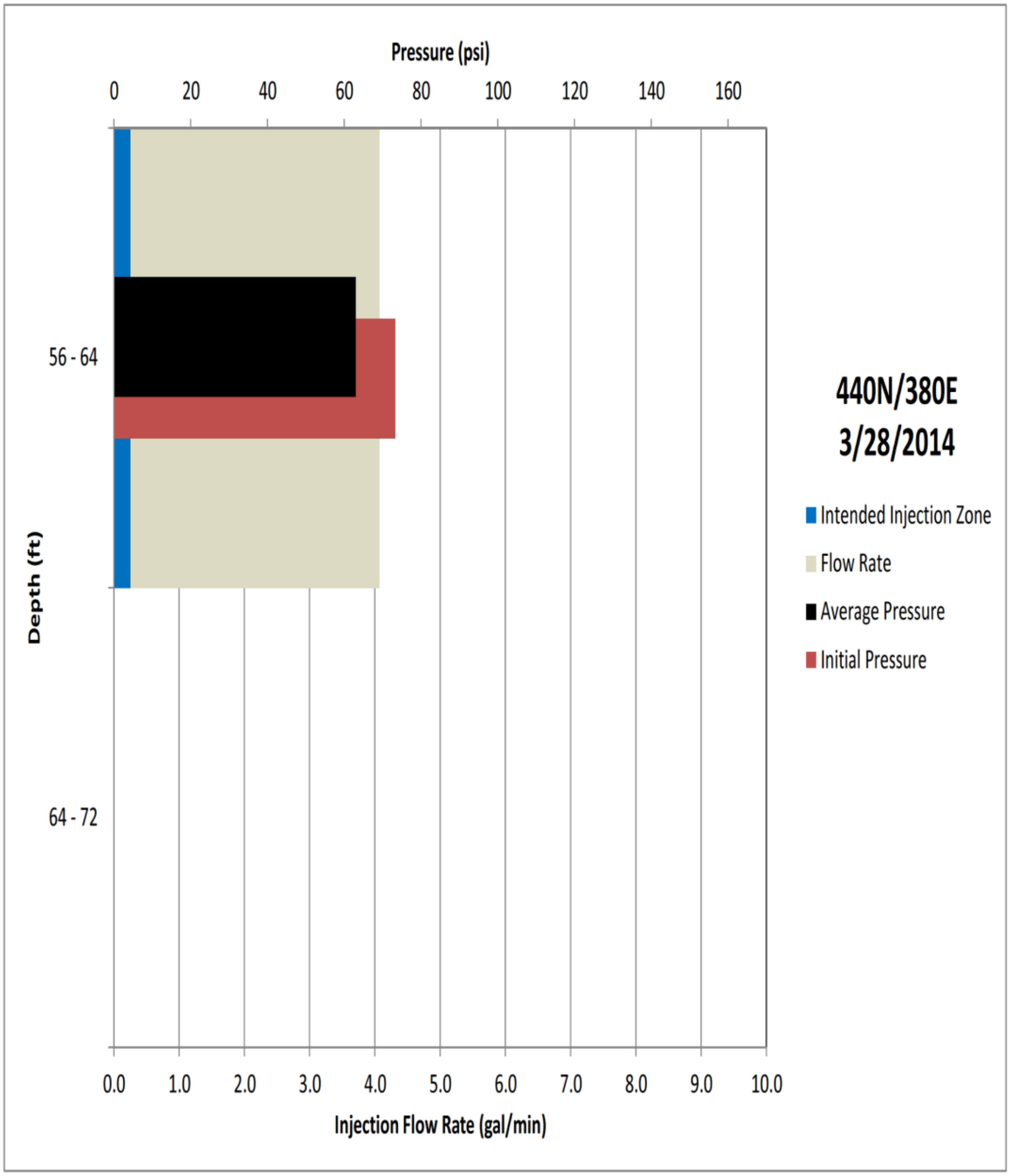
TITLE: **REAGENT FLOW RATE FOR 440N/380E ON 3/28/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE	
DRAFTED	LD		**1g**
PROJECT #	117-2201329		
DATE	5-9-14		

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
60		1.8	2	3		
		0.6	1	3		
	100	0.3	1	3	SM	
		0.3	1	3		
		0	1	3		
65		0	1	3	SC-SM	
		0	1 1	1.5 1.5		
		0 0	1 1	1.5 1.5	CL-ML	
	100	0	1	1.5		
		0	1	1.5		

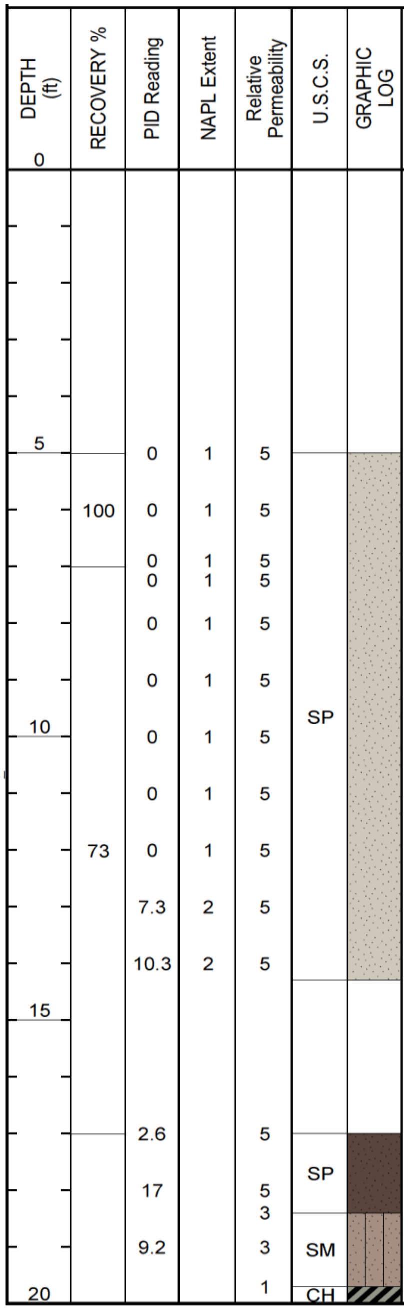


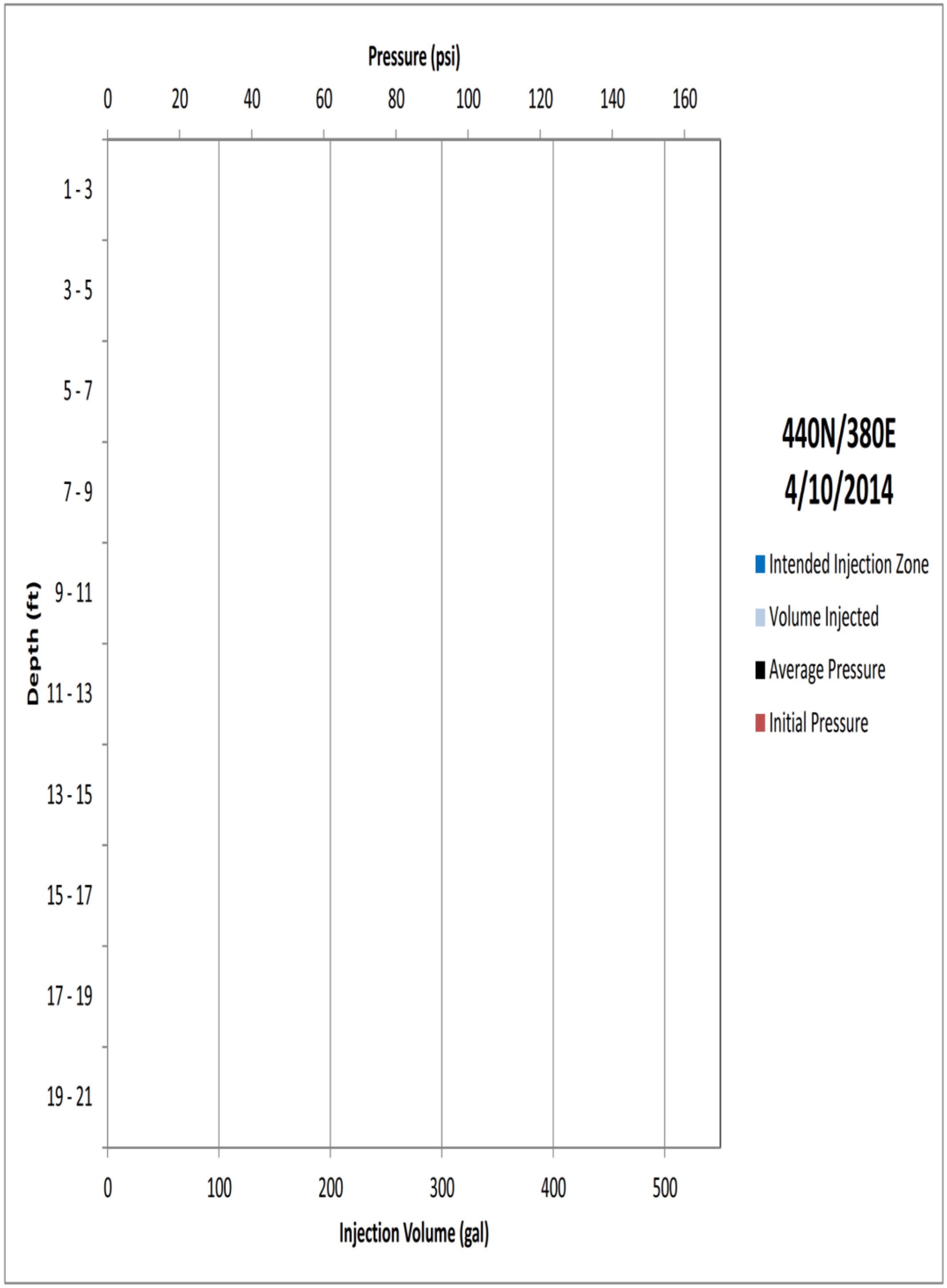
TITLE: REAGENT FLOW RATE FOR 440N/380E ON 3/28/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION: Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	1h
PROJECT #	117-2201329	
DATE	5-9-14	





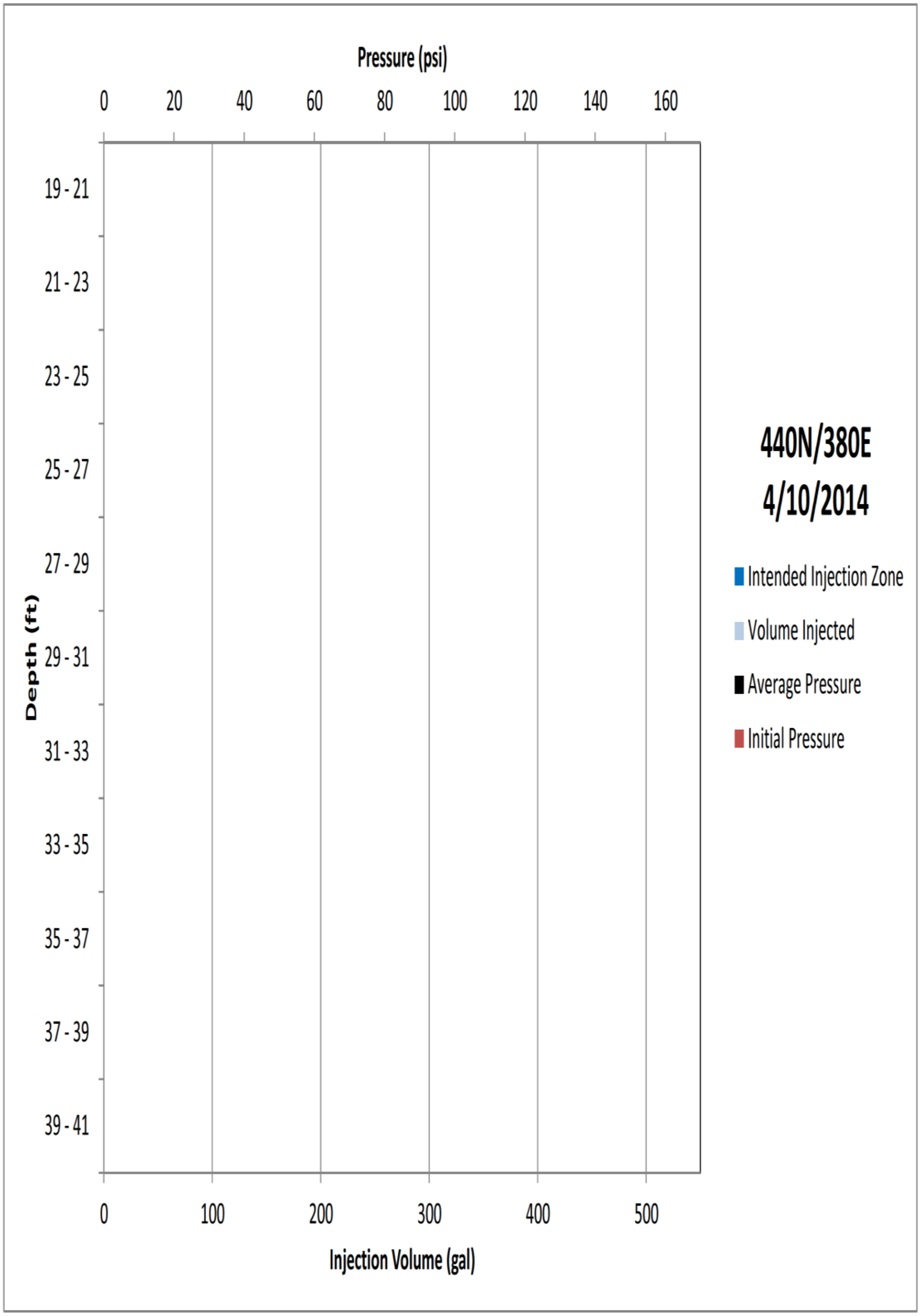
TITLE: **REAGENT VOLUME INJECTED INTO 440N/380E ON 4/10/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

LOCATION: **Cabot Carbon/Koppers Superfund Site**
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**2a**
PROJECT #	117-2201329	
DATE	5-9-14	

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
20		2.7		1	CH	
		1.9		1		
	100	1.8	3 3	2 1.5		
		1.4	3	1.5	CL-ML	
		0.5	3 2	1.5 2		
25		5.9	2	3	ML	
		2.6	2	3	GM	
		4.2 15.4	2 2	3 2	ML	
		18	2 2	2.5 2.5		
		3.6	2	2.5		
30		4.9	2	2.5		
		15.2	2	2.5		
	100	16.1	2	2.5		
		7.9	2	2.5	SM	
		7.1	2	2.5		
35		7.4	2	2.5		
		46	2 3	2.5 2		
		18.5 59	3 3	2 2		
		79	3	2		
		164	3	2	ML	
40						

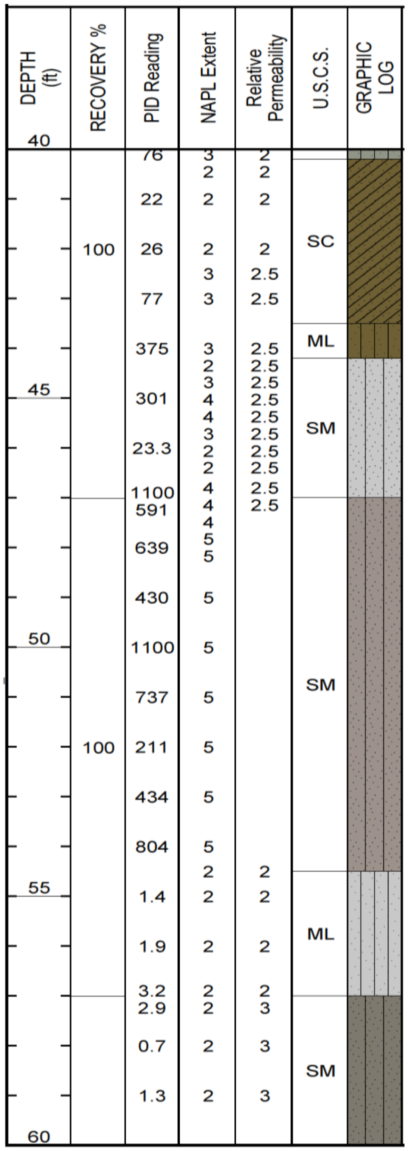


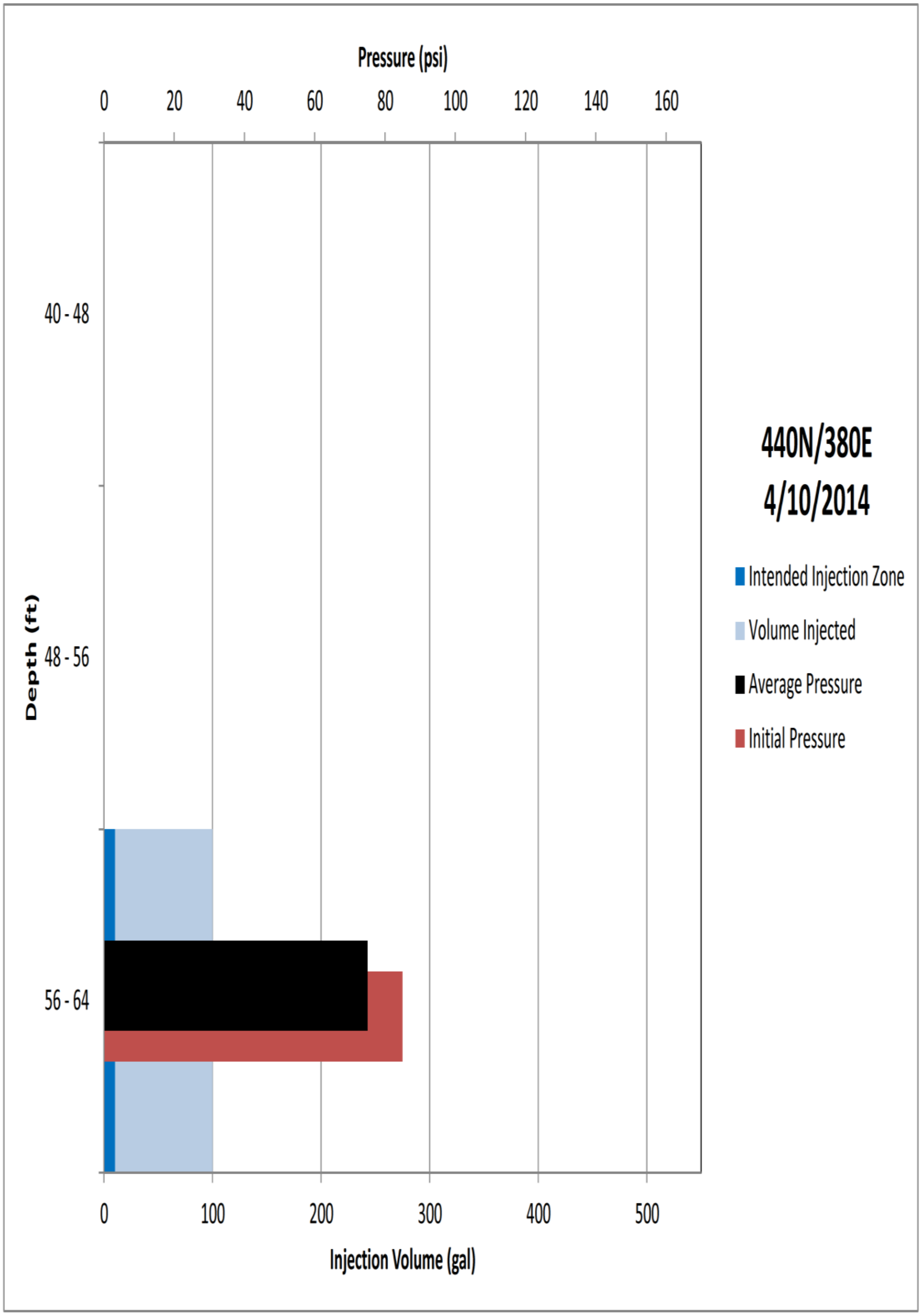
TITLE:
REAGENT VOLUME INJECTED INTO 440N/380E ON 4/10/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION:
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**2b**
PROJECT #	117-2201329	
DATE	5-9-14	





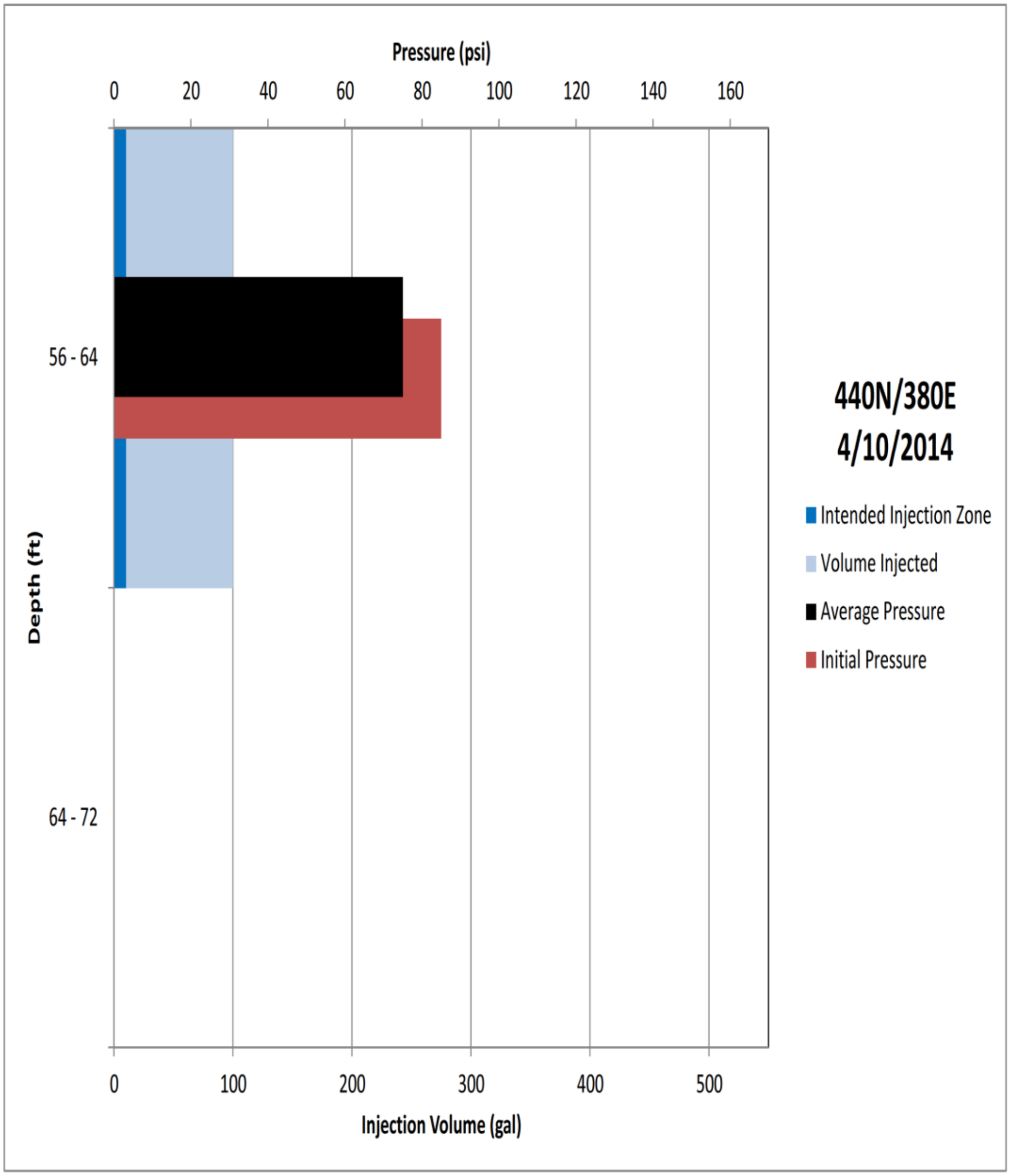
TITLE: **REAGENT VOLUME INJECTED INTO 440N/380E ON 4/10/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE	
DRAFTED	LD		
PROJECT #	117-2201329		**2c**
DATE	5-9-14		

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
60		1.8	2	3		
		0.6	1	3		
	100	0.3	1	3	SM	
		0.3	1	3		
		0	1	3		
65		0	1	3	SC-SM	
		0	1 1	1.5 1.5		
		0 0	1 1	1.5 1.5	CL-ML	
	100	0	1	1.5		
		0	1	1.5		



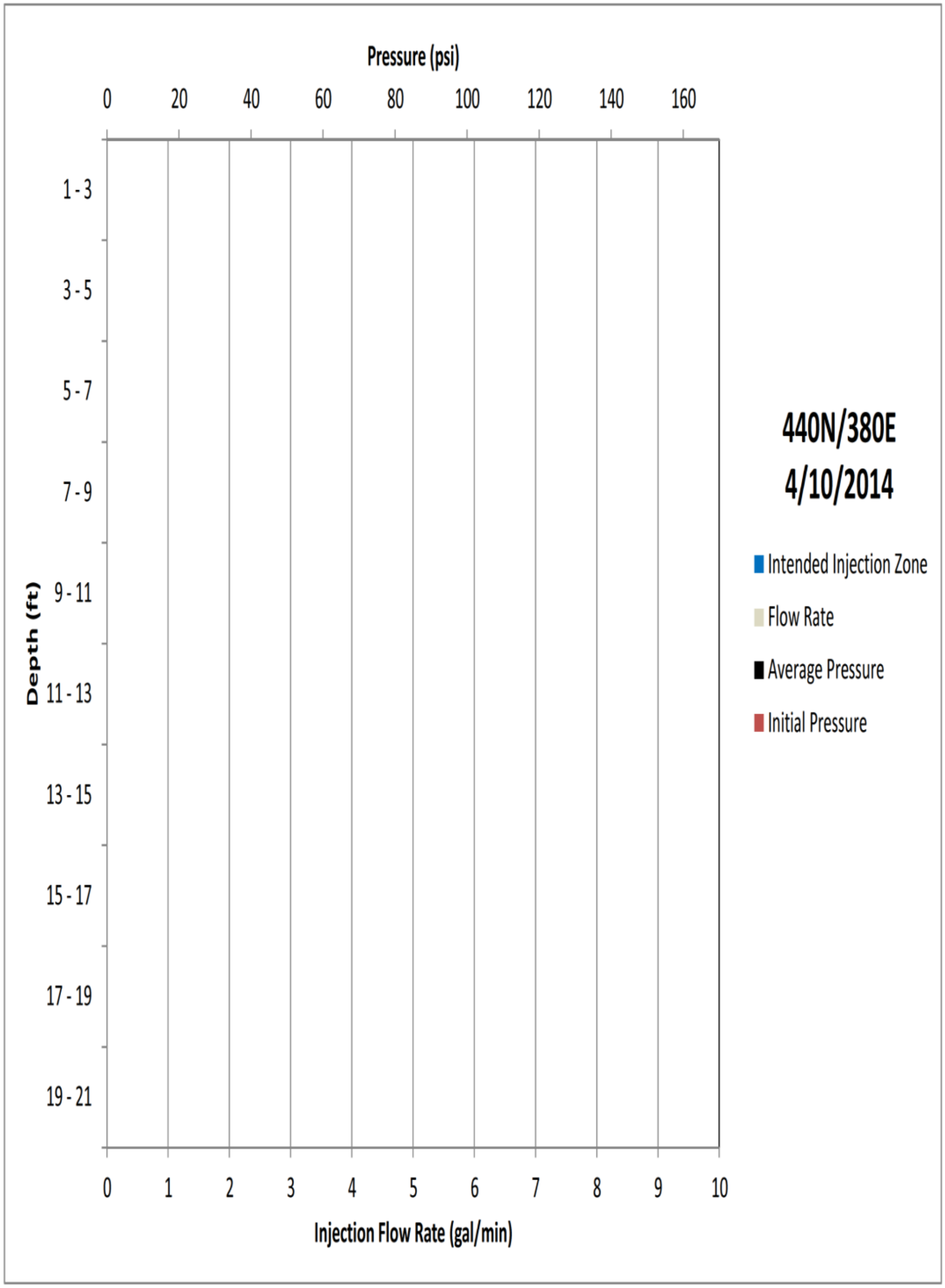
TITLE: REAGENT VOLUME INJECTED INTO 440N/380E ON 4/10/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES

LOCATION: Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	2d
PROJECT #	117-2201329	
DATE	5-9-14	

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.
0					
5		0	1	5	SP
	100	0	1	5	
		0	1	5	
		0	1	5	
		0	1	5	
		0	1	5	
10		0	1	5	SP
		0	1	5	
	73	0	1	5	
		7.3	2	5	
		10.3	2	5	
15					
		2.6		5	
		17		5	SP
				3	
		9.2		3	SM
				1	
20					CH

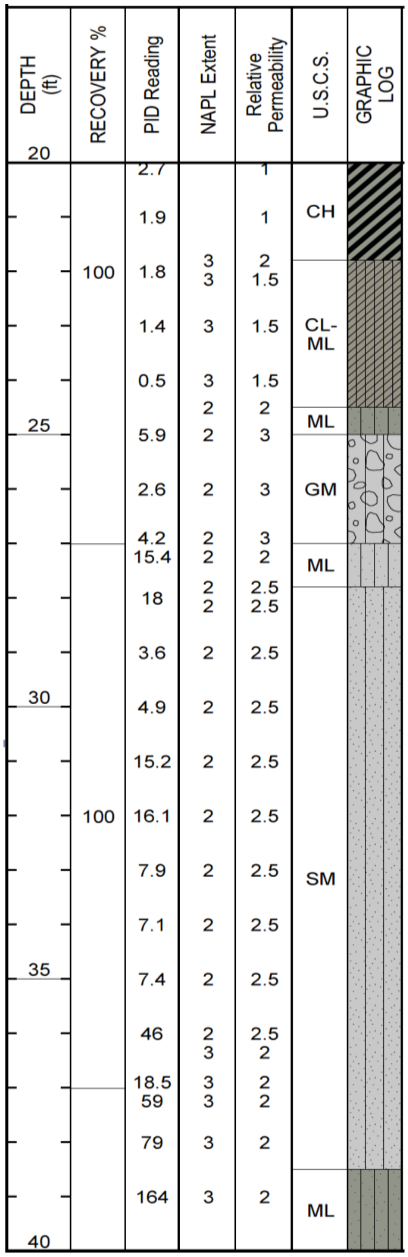


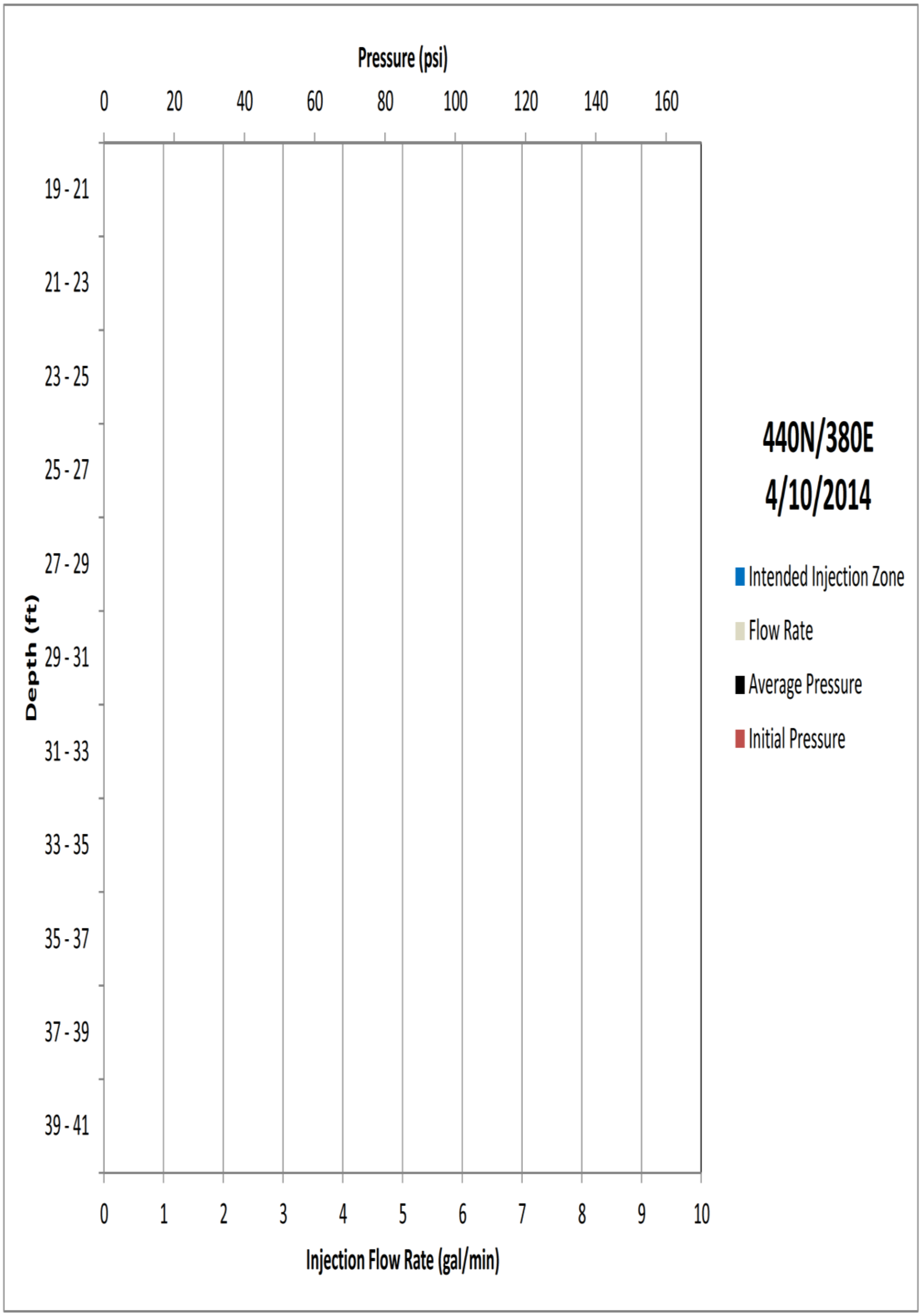
TITLE: **REAGENT FLOW RATE FOR 440N/380E ON 4/10/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

LOCATION: **Cabot Carbon/Koppers Superfund Site, Gainesville, Florida**

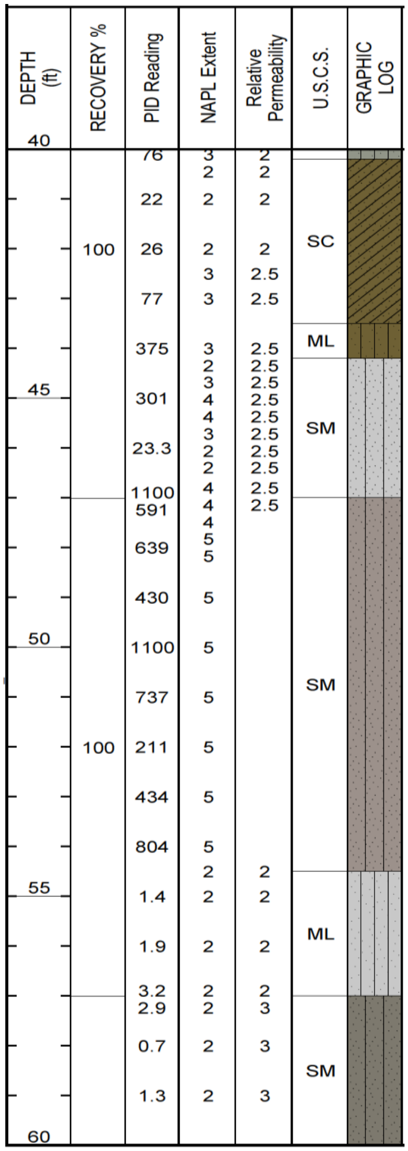
TETRA TECH

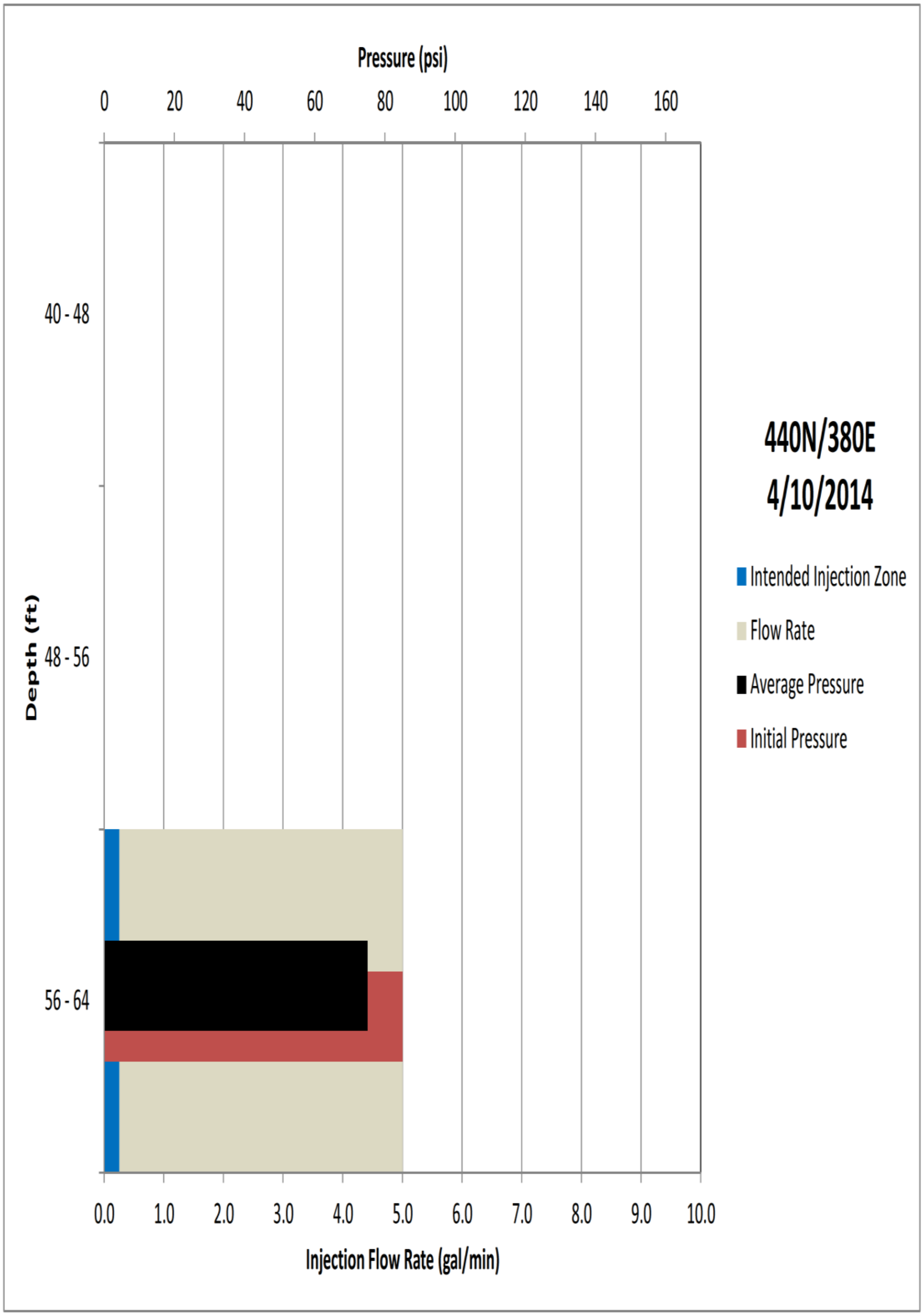
APPROVED	JE	FIGURE
DRAFTED	LD	**2e**
PROJECT #	117-2201329	
DATE	5-9-14	





TITLE: REAGENT FLOW RATE FOR 440N/380E ON 4/10/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES			
LOCATION: Cabot Carbon/Koppers Superfund Site Gainesville, Florida			
TETRA TECH	APPROVED	JE	FIGURE
	DRAFTED	LD	2f
	PROJECT #	117-2201329	
	DATE	5-9-14	





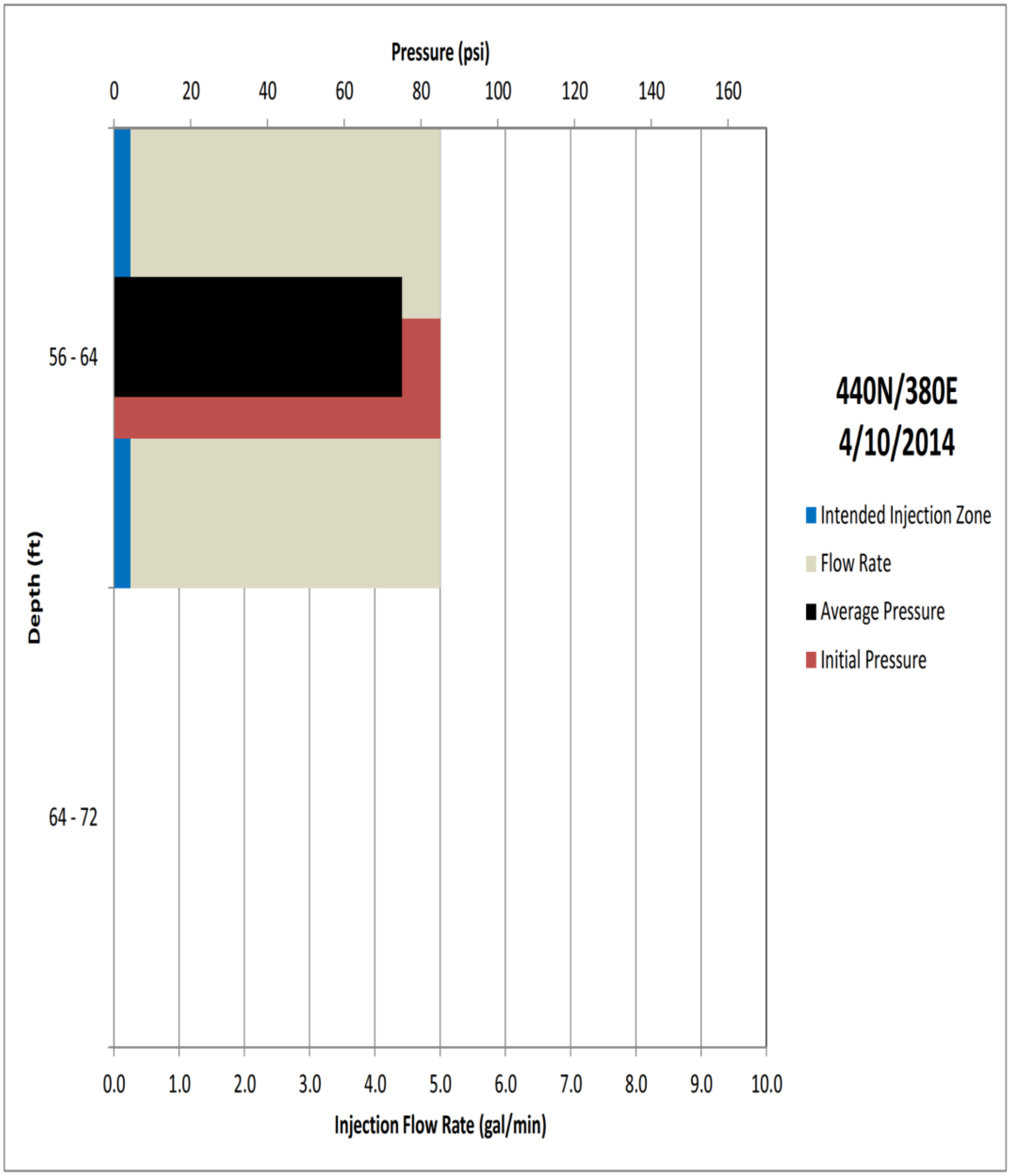
TITLE: **REAGENT FLOW RATE FOR 440N/380E ON 4/10/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

LOCATION: **Cabot Carbon/Koppers Superfund Site Gainesville, Florida**

TETRA TECH

APPROVED	JE	FIGURE
DRAFTED	LD	**2g**
PROJECT #	117-2201329	
DATE	5-9-14	

DEPTH (ft)	RECOVERY %	PID Reading	NAPL Extent	Relative Permeability	U.S.C.S.	GRAPHIC LOG
60		1.8	2	3		
		0.6	1	3		
	100	0.3	1	3	SM	
		0.3	1	3		
		0	1	3		
65		0	1	3	SC-SM	
		0	1 1	1.5 1.5		
		0 0	1 1	1.5 1.5	CL-ML	
	100	0	1	1.5		
		0	1	1.5		



TITLE: **REAGENT FLOW RATE FOR 440N/380E ON 4/10/14 WITH AVERAGE AND MAXIMUM INJECTION PRESSURES**

LOCATION: **Cabot Carbon/Koppers Superfund Site**
Gainesville, Florida

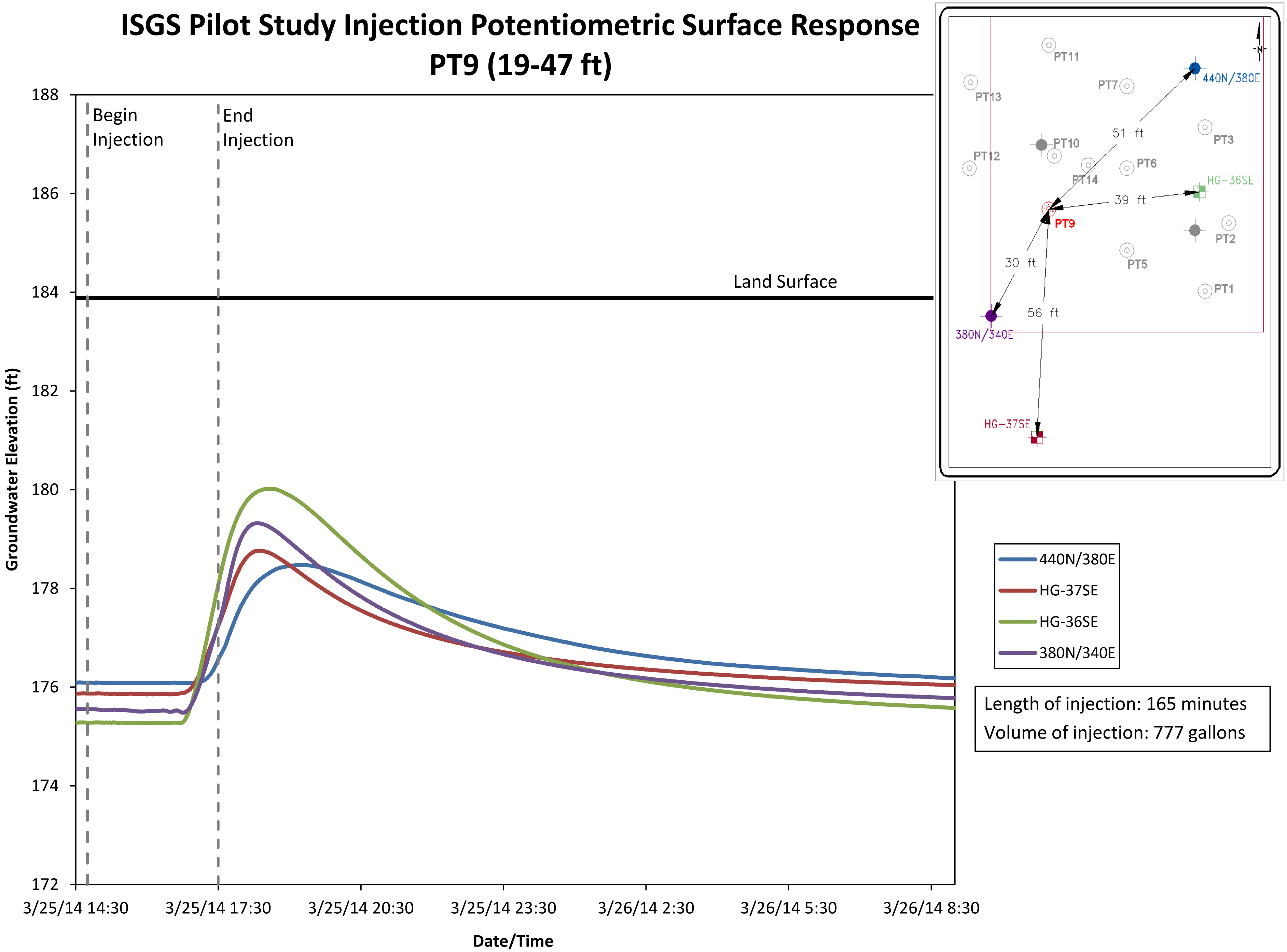
TETRA TECH

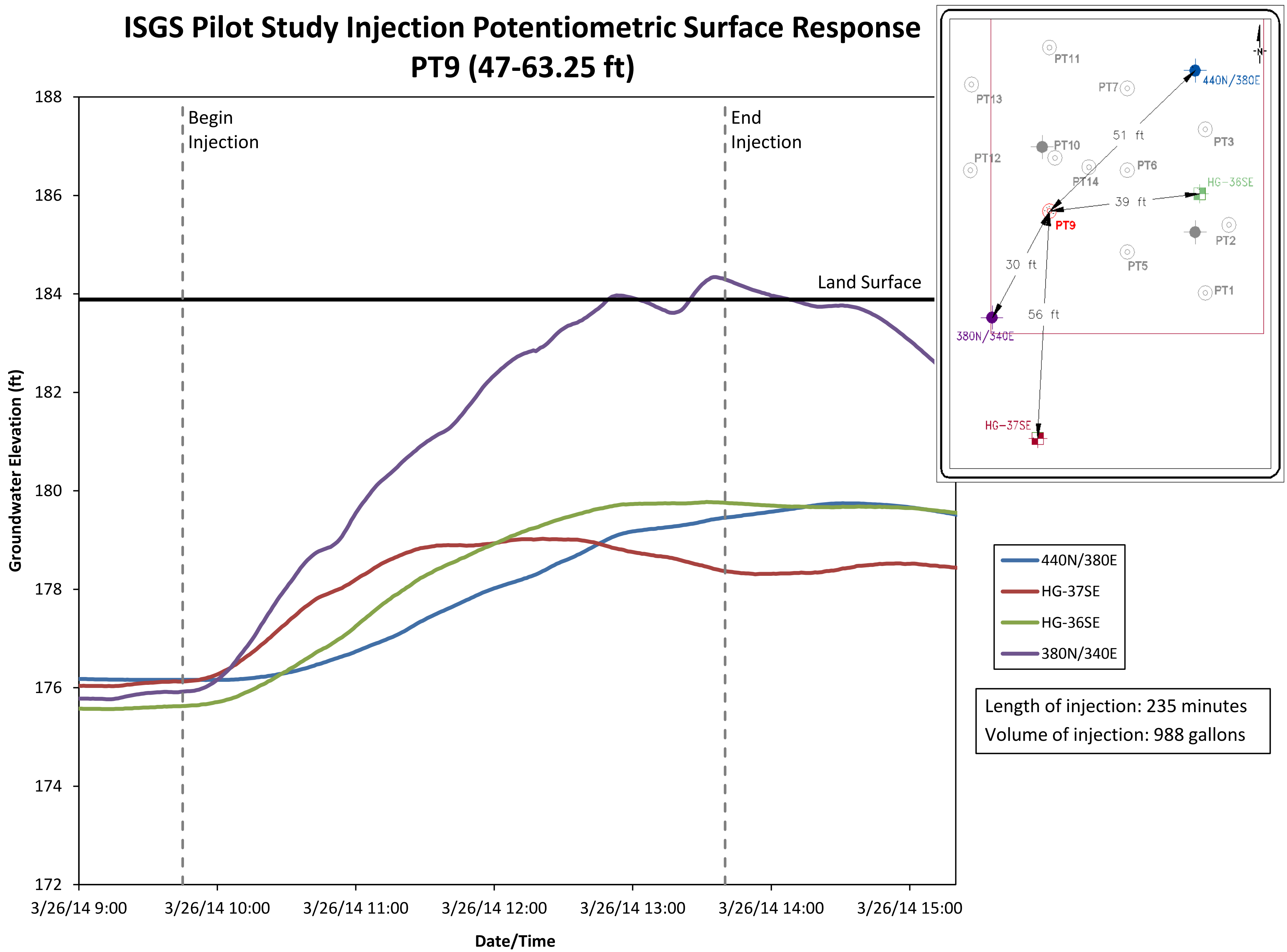
APPROVED	JE	FIGURE
DRAFTED	LD	**2h**
PROJECT #	117-2201329	
DATE	5-9-14	

APPENDIX D

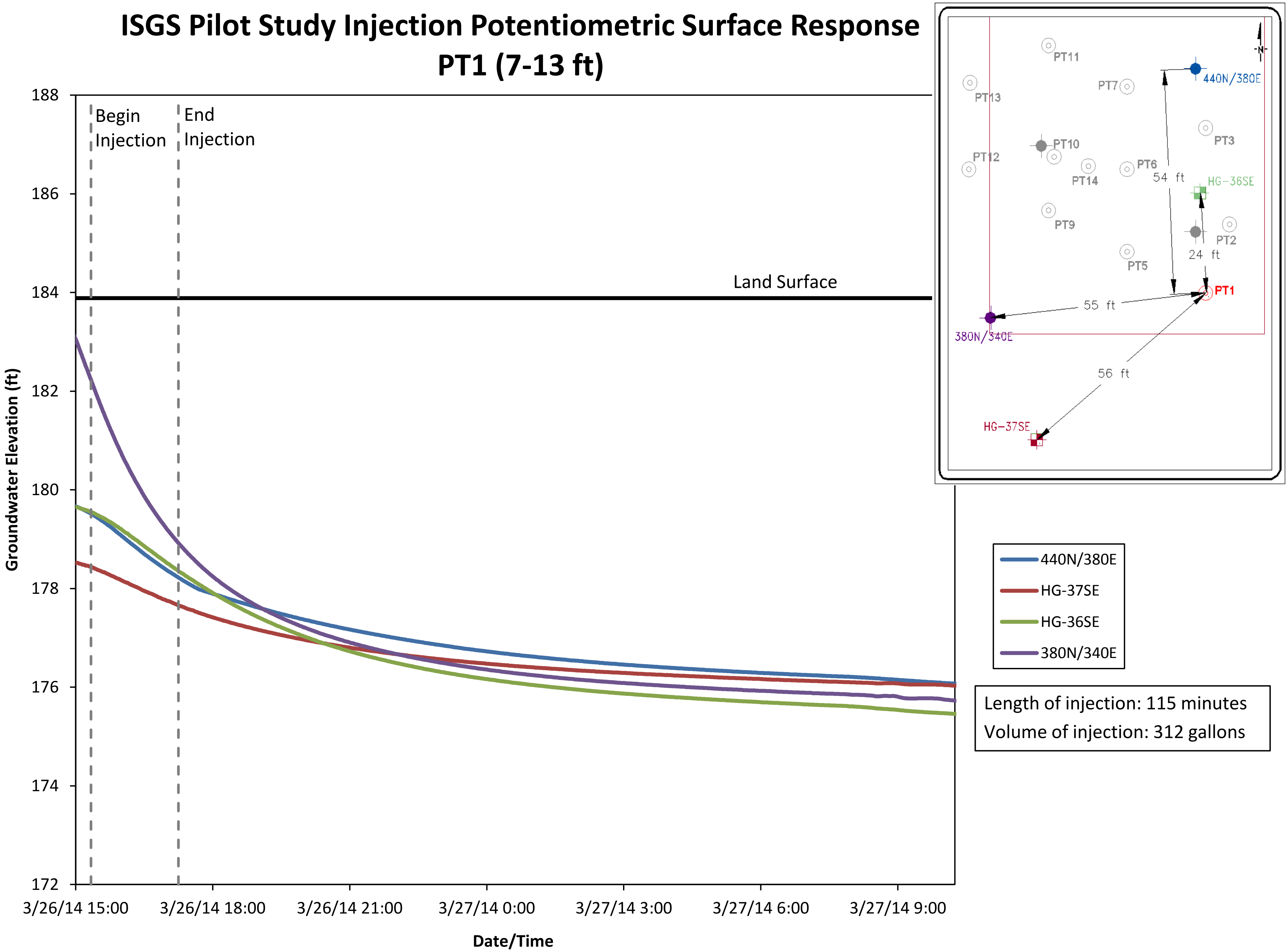
FORMATION INJECTION-PRESSURE OBSERVATIONS

ISGS Pilot Study Injection Potentiometric Surface Response
PT9 (19-47 ft)

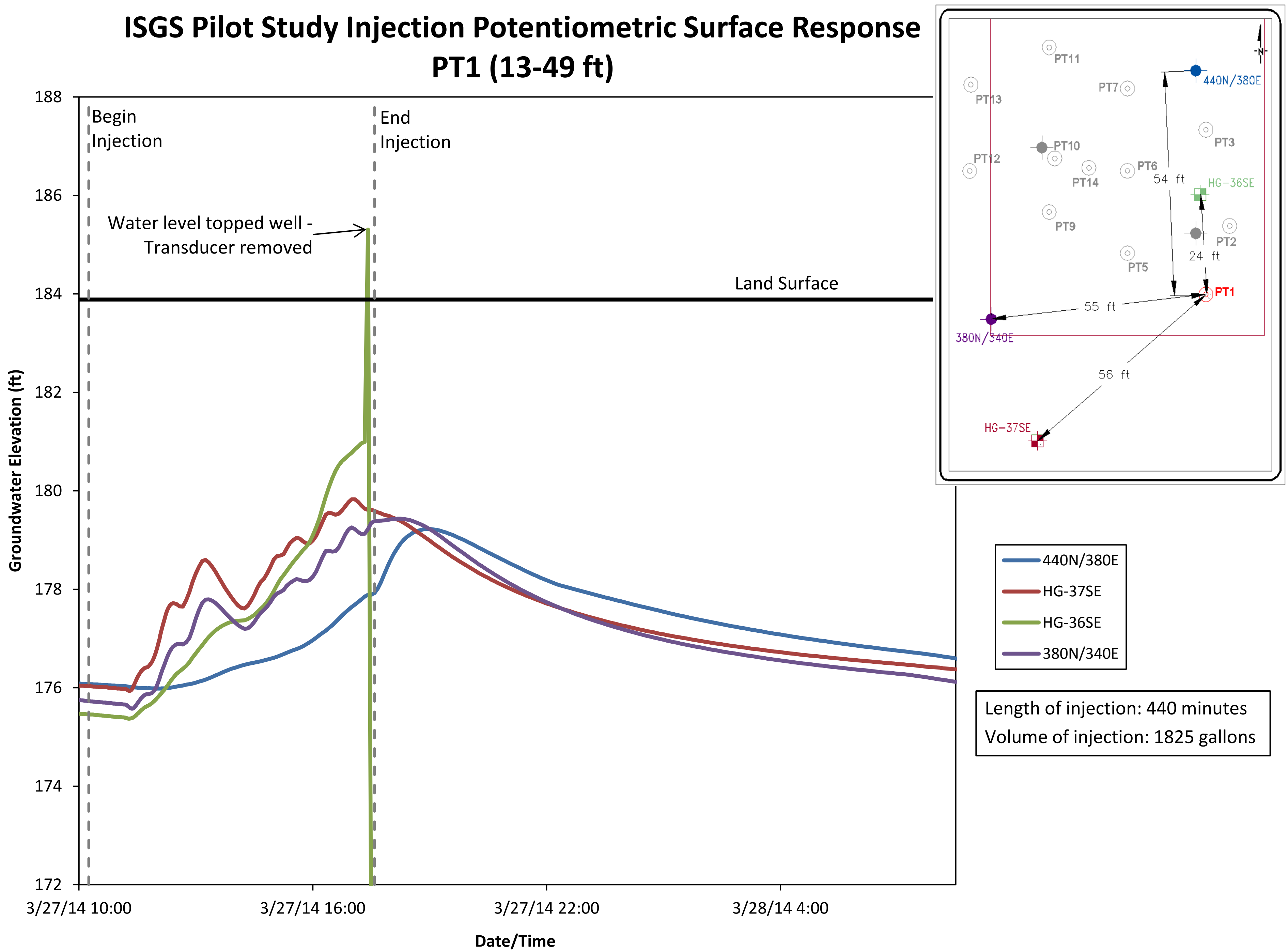



ISGS Pilot Study Injection Potentiometric Surface Response
PT9 (47-63.25 ft)
Groundwater Elevation (ft)
Date/Time
Begin Injection
End Injection
Land Surface
188
186
184
182
180
178
176
174
172
3/26/14 9:00
3/26/14 10:00
3/26/14 11:00
3/26/14 12:00
3/26/14 13:00
3/26/14 14:00
3/26/14 15:00
440N/380E
HG-37SE
HG-36SE
380N/340E
PT11
PT7
PT13
PT3
PT10
PT12
PT6
PT14
HG-36SE
39 ft
51 ft
PT9
PT2
30 ft
PT5
PT1
56 ft
380N/340E
HG-37SE
440N/380E
Length of injection: 235 minutes
Volume of injection: 988 gallons

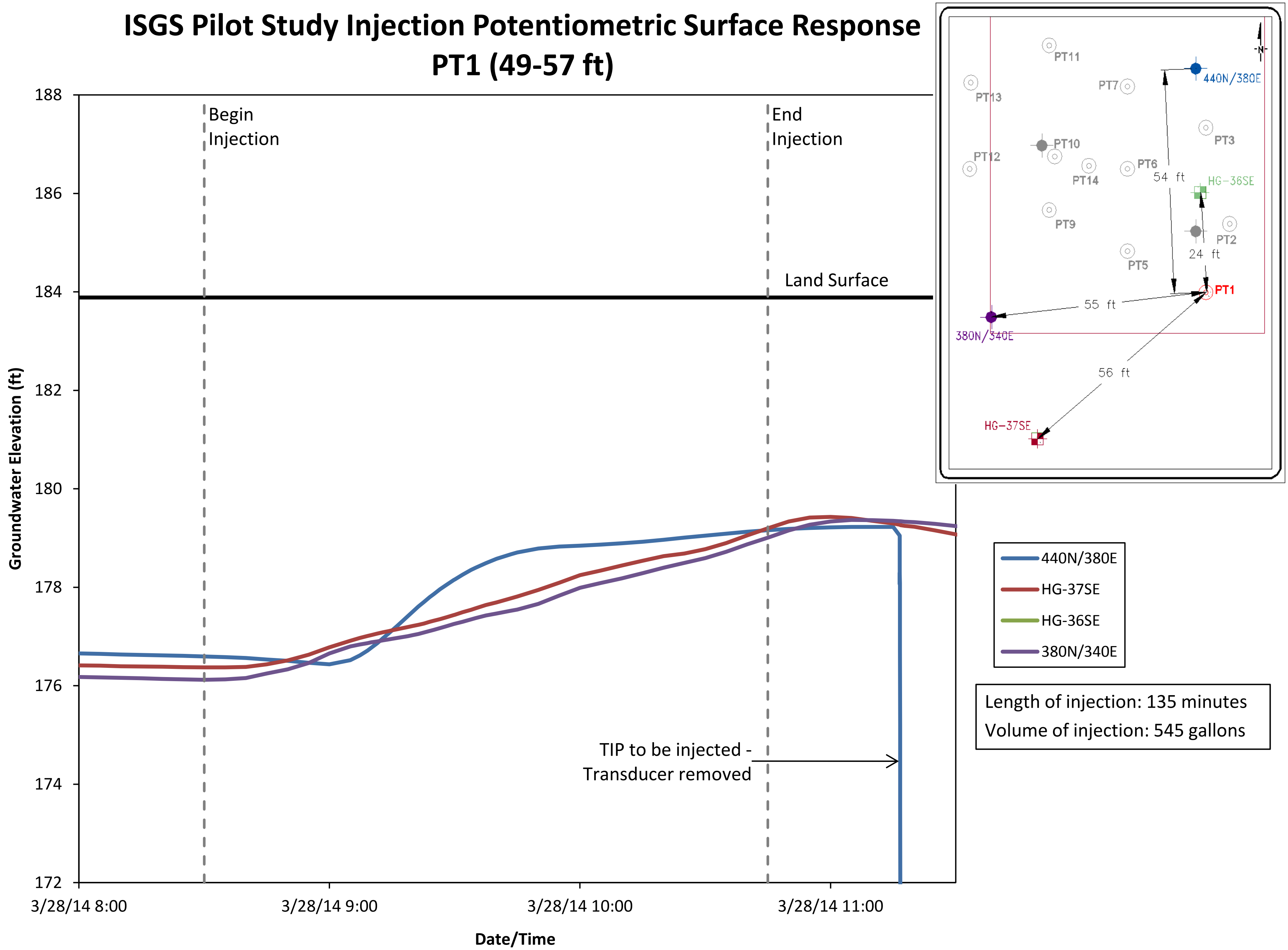
ISGS Pilot Study Injection Potentiometric Surface Response
PT1 (7-13 ft)

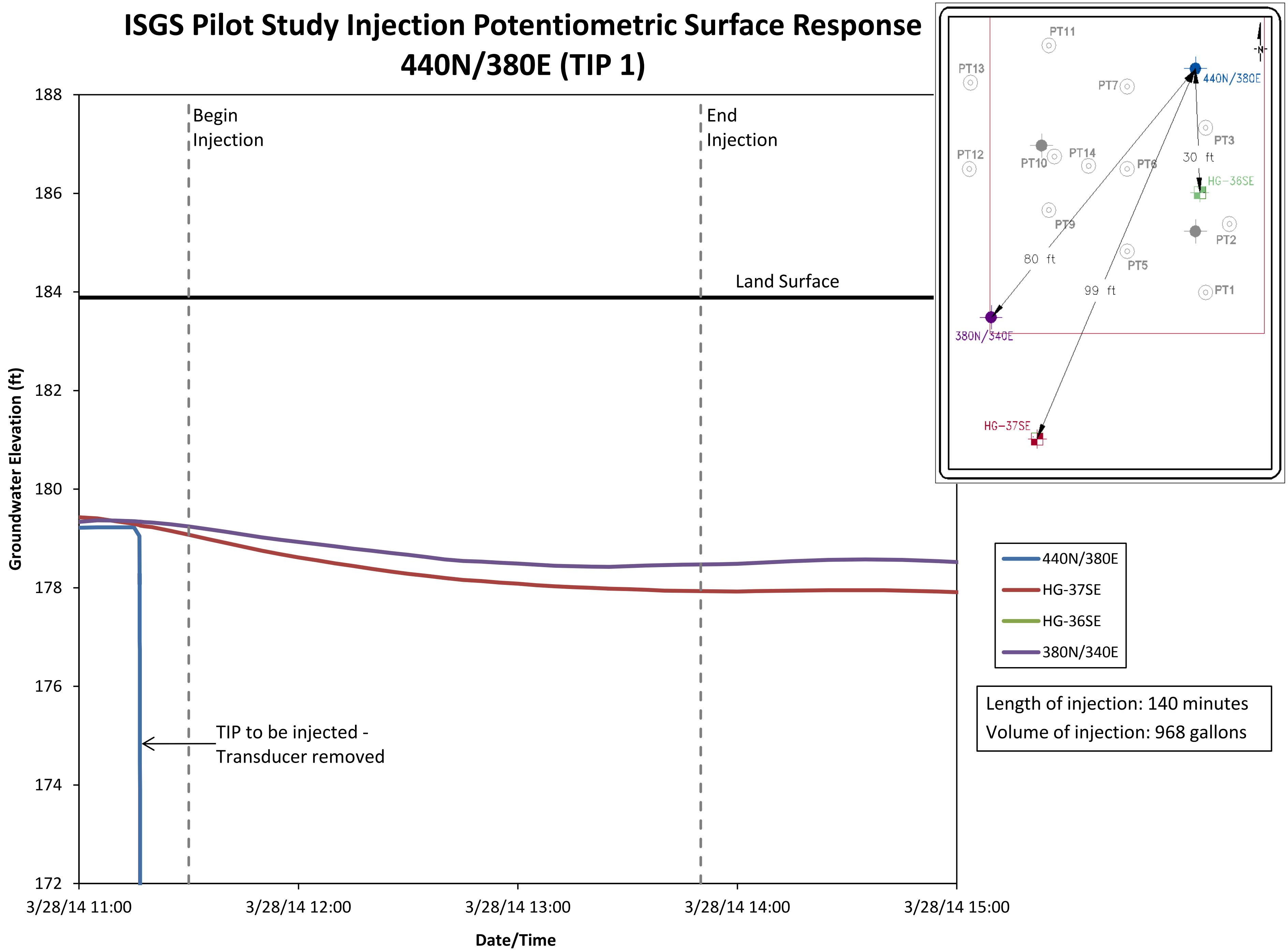


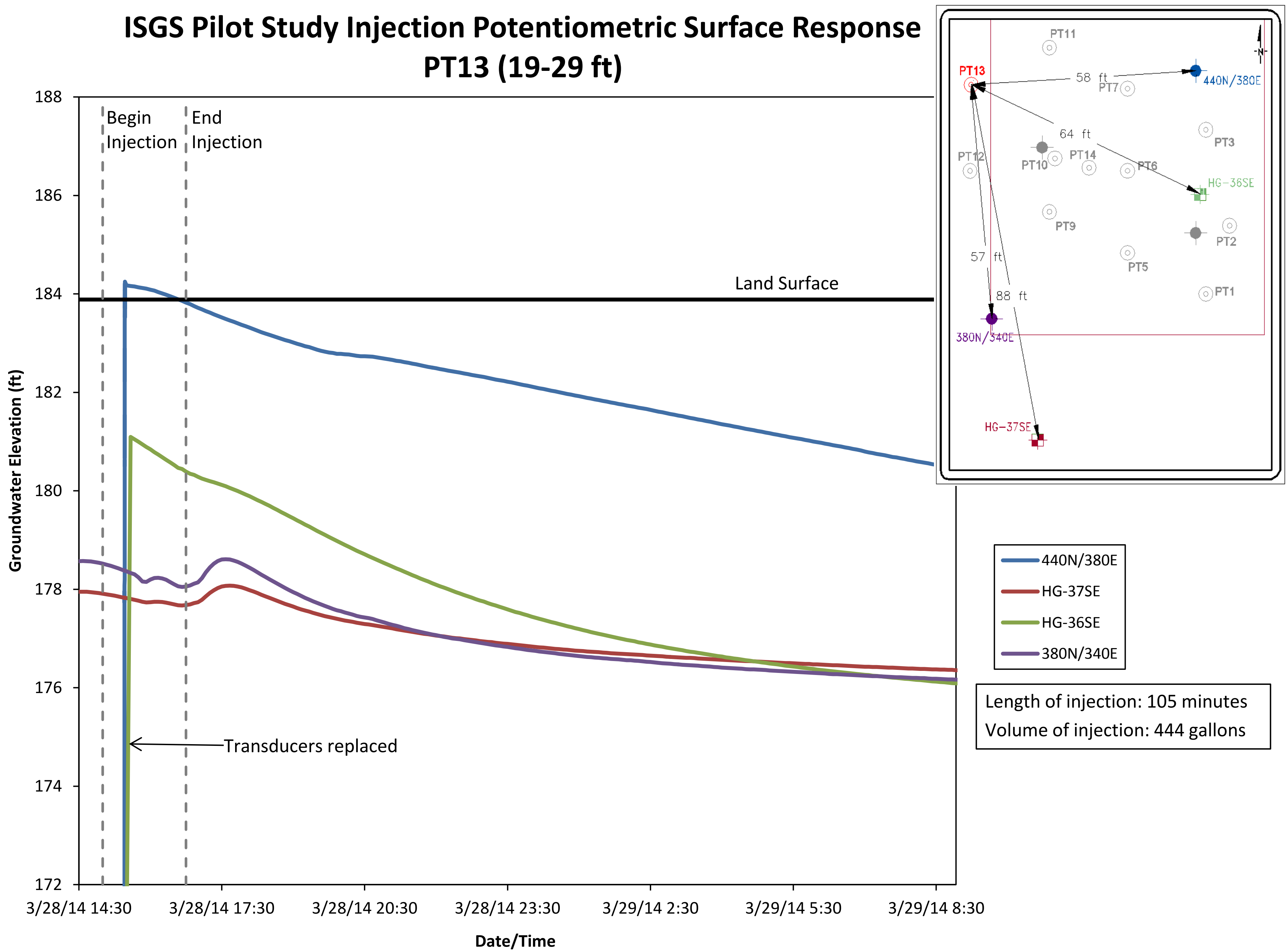
Length of injection: 115 minutes
Volume of injection: 312 gallons

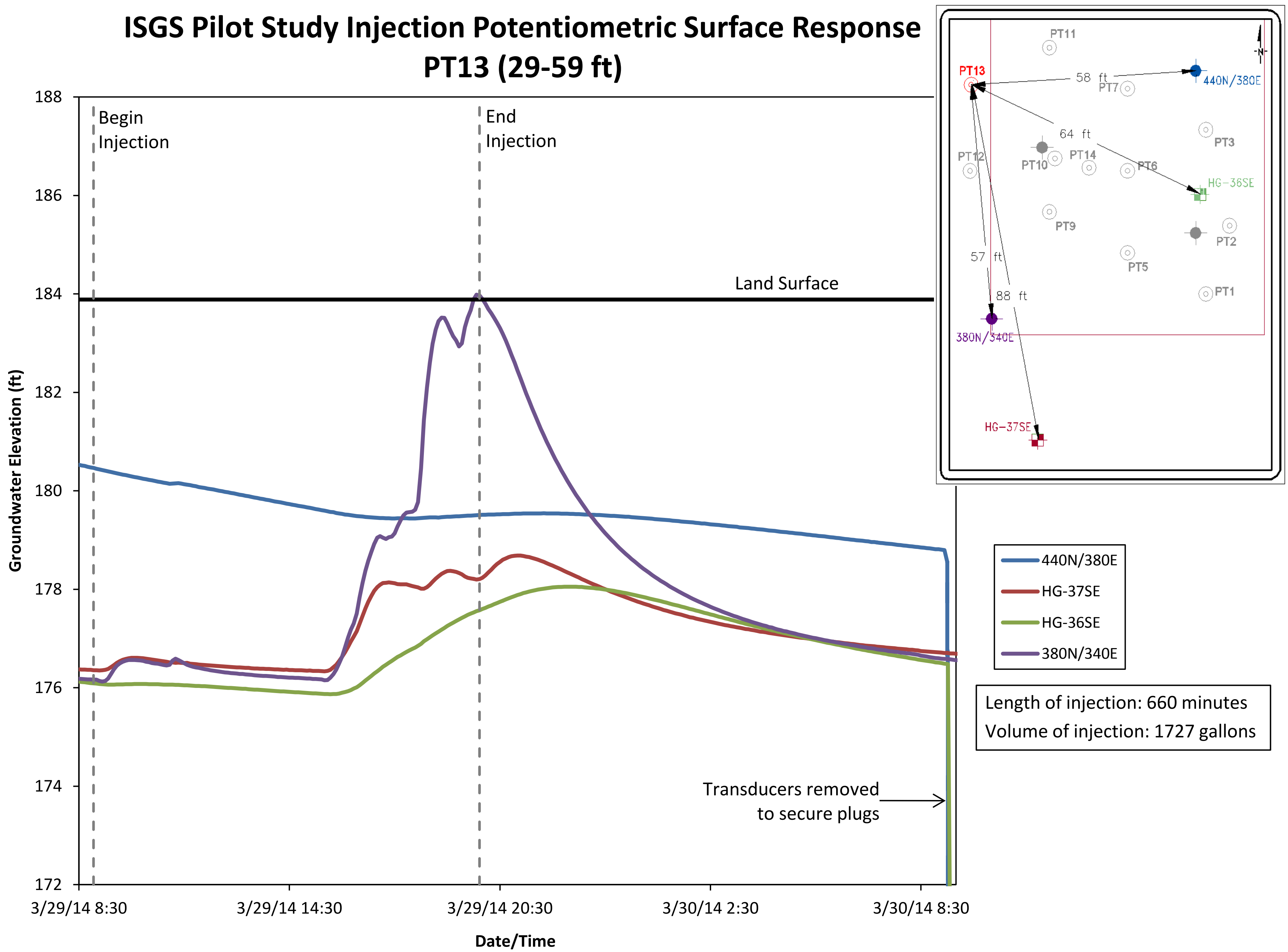

ISGS Pilot Study Injection Potentiometric Surface Response
PT1 (13-49 ft)
Groundwater Elevation (ft)
188
186
184
182
180
178
176
174
172
Begin Injection
End Injection
Water level topped well - Transducer removed
Land Surface
3/27/14 10:00
3/27/14 16:00
3/27/14 22:00
3/28/14 4:00
Date/Time
PT11
PT13
PT7
440N/380E
PT3
PT10
PT12
PT6
PT14
54 ft
HG-36SE
PT9
PT2
24 ft
PT5
PT1
55 ft
380N/340E
56 ft
HG-37SE
N
440N/380E
HG-37SE
HG-36SE
380N/340E
Length of injection: 440 minutes
Volume of injection: 1825 gallons

ISGS Pilot Study Injection Potentiometric Surface Response
PT1 (49-57 ft)

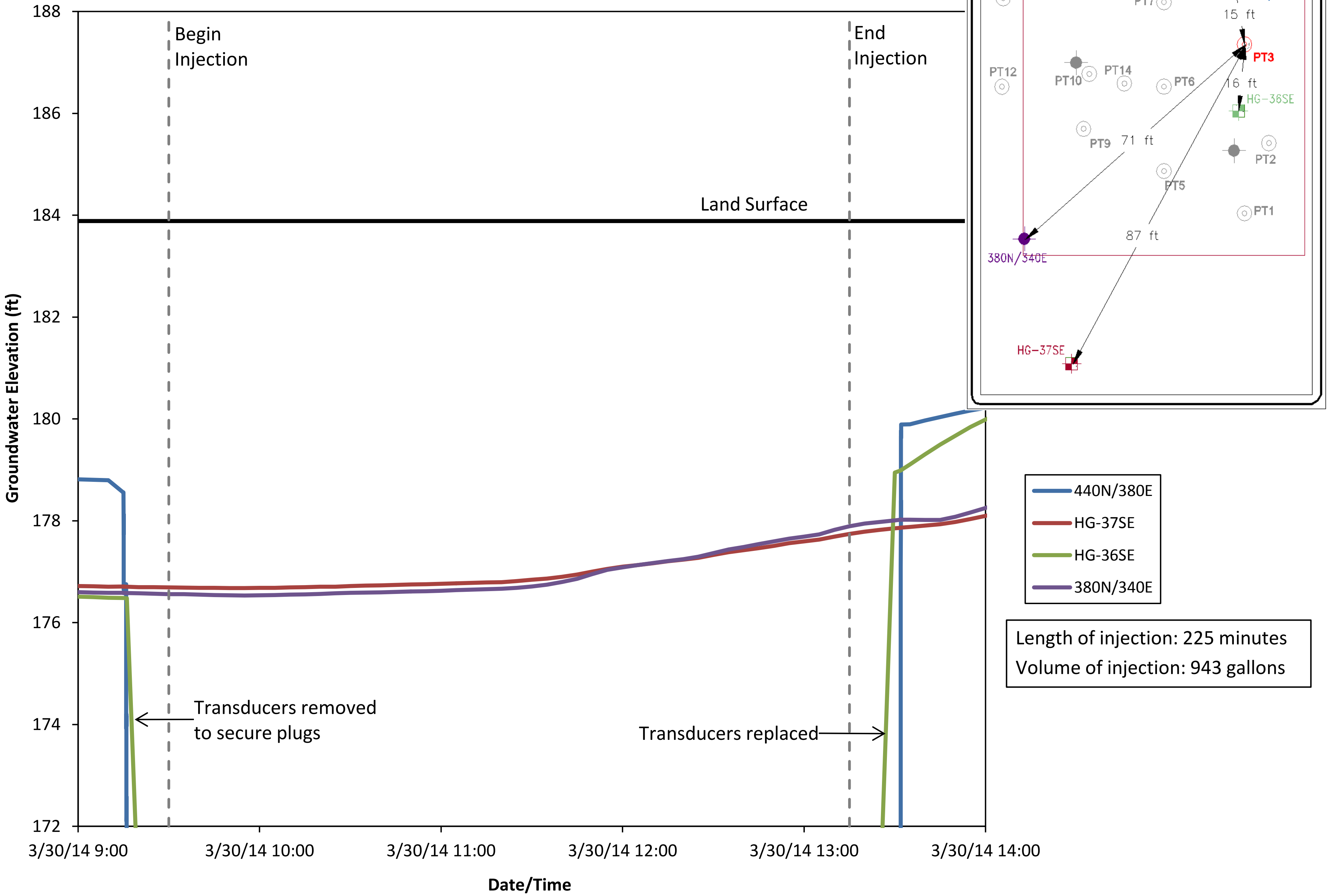



ISGS Pilot Study Injection Potentiometric Surface Response
440N/380E (TIP 1)
Groundwater Elevation (ft)
188
186
184
182
180
178
176
174
172
Begin Injection
End Injection
Land Surface
TIP to be injected - Transducer removed
3/28/14 11:00
3/28/14 12:00
3/28/14 13:00
3/28/14 14:00
3/28/14 15:00
Date/Time
440N/380E
HG-37SE
HG-36SE
380N/340E
Length of injection: 140 minutes
Volume of injection: 968 gallons
PT11
PT13
PT7
440N/380E
PT3
PT12
PT10
PT14
PT6
30 ft
HG-36SE
PT9
PT2
80 ft
PT5
99 ft
PT1
380N/340E
HG-37SE
N

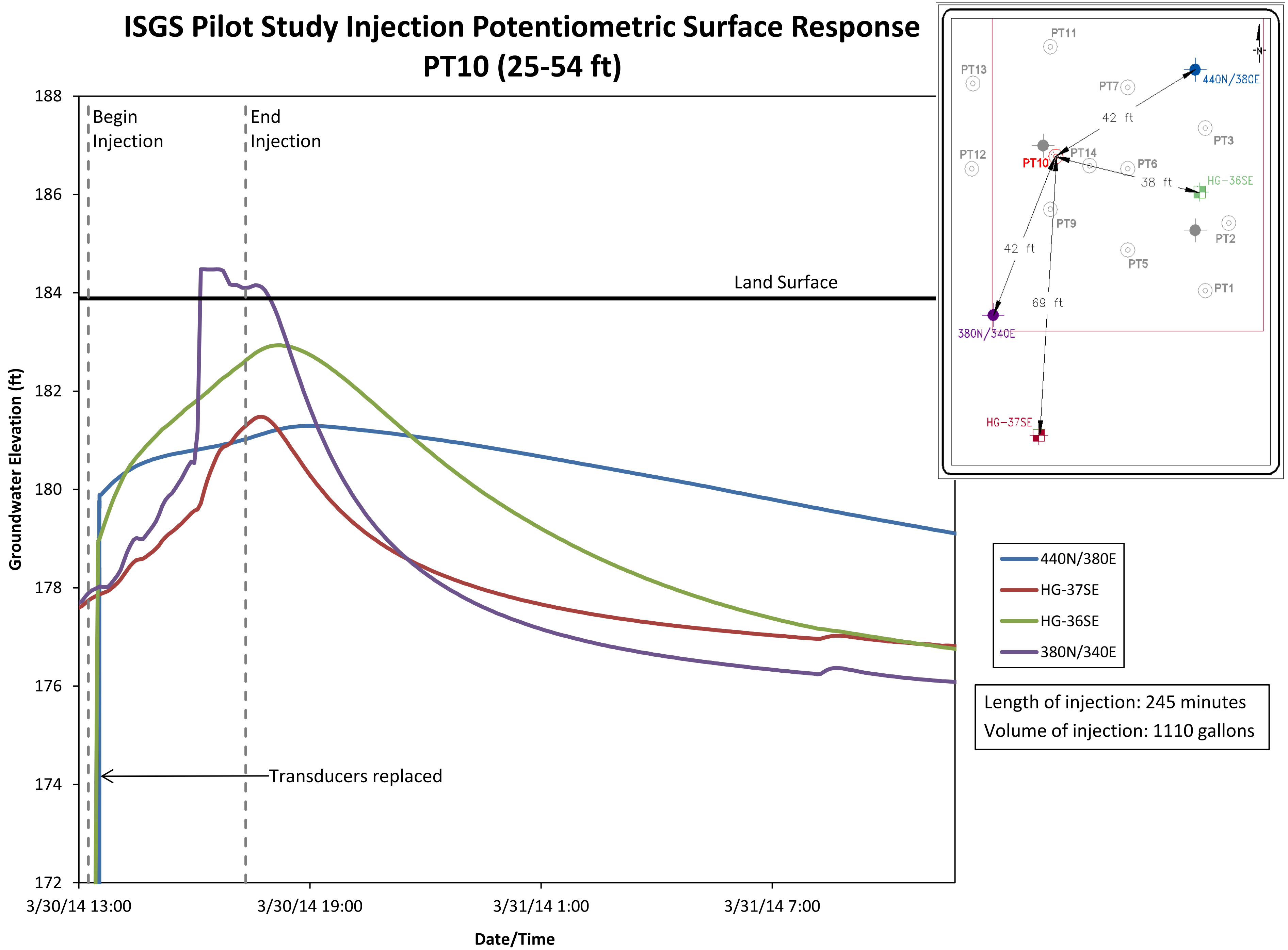

ISGS Pilot Study Injection Potentiometric Surface Response
PT13 (19-29 ft)
Groundwater Elevation (ft)
188
186
184
182
180
178
176
174
172
Begin Injection
End Injection
Land Surface
Transducers replaced
3/28/14 14:30
3/28/14 17:30
3/28/14 20:30
3/28/14 23:30
3/29/14 2:30
3/29/14 5:30
3/29/14 8:30
Date/Time
PT11
PT13
58 ft
PT7
440N/380E
64 ft
PT3
PT12
PT10
PT14
PT6
HG-36SE
PT9
PT2
57 ft
PT5
88 ft
PT1
380N/340E
HG-37SE
N
440N/380E
HG-37SE
HG-36SE
380N/340E
Length of injection: 105 minutes
Volume of injection: 444 gallons


ISGS Pilot Study Injection Potentiometric Surface Response
PT13 (29-59 ft)
Groundwater Elevation (ft)
Date/Time
Begin Injection
End Injection
Land Surface
Transducers removed to secure plugs
188
186
184
182
180
178
176
174
172
3/29/14 8:30
3/29/14 14:30
3/29/14 20:30
3/30/14 2:30
3/30/14 8:30
440N/380E
HG-37SE
HG-36SE
380N/340E
Length of injection: 660 minutes
Volume of injection: 1727 gallons
PT11
PT13
58 ft
PT7
64 ft
PT3
PT12
PT10
PT14
PT6
HG-36SE
PT9
PT2
57 ft
PT5
88 ft
PT1
380N/340E
HG-37SE
N

ISGS Pilot Study Injection Potentiometric Surface Response
PT3 (19-56 ft)

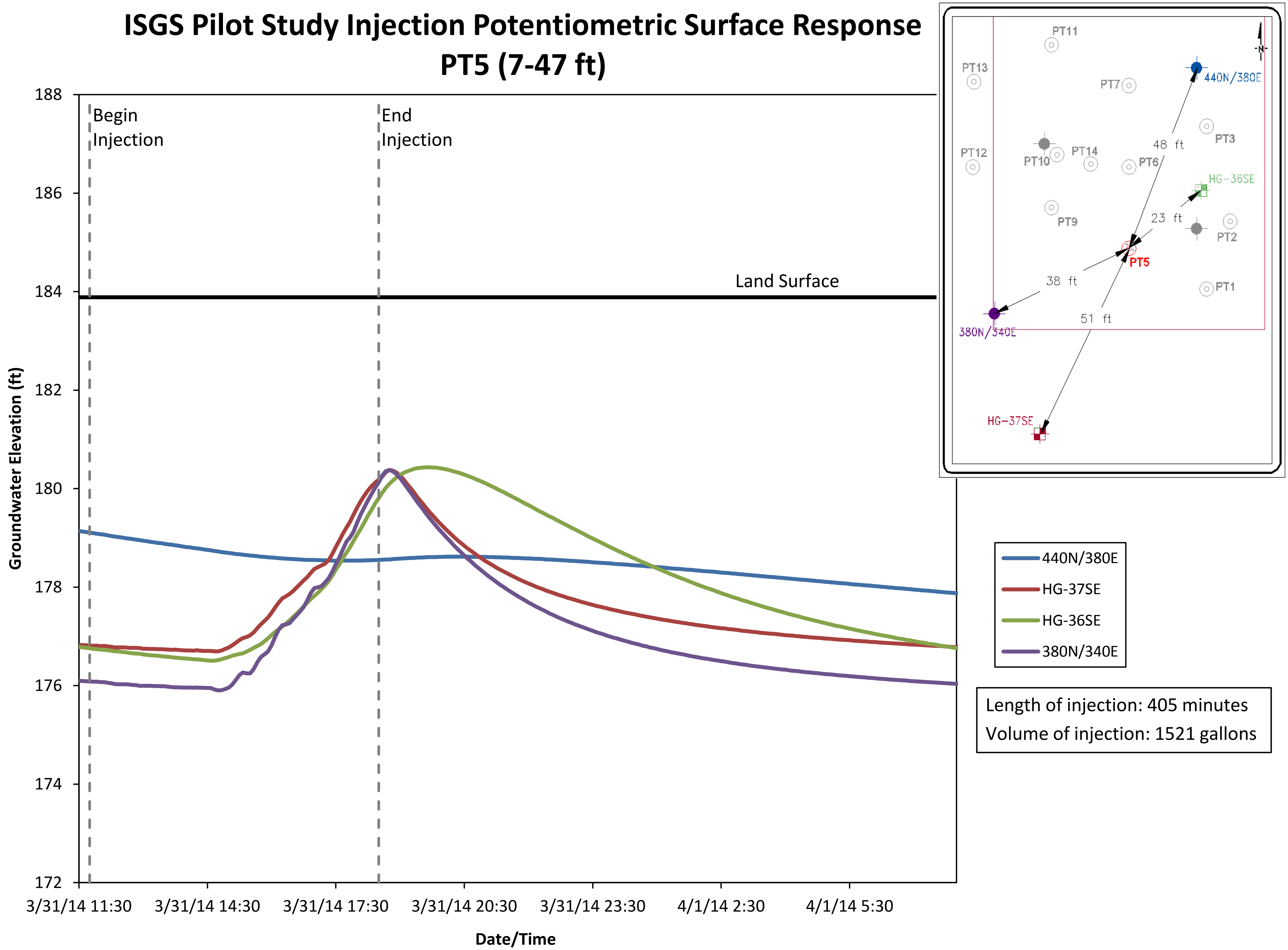


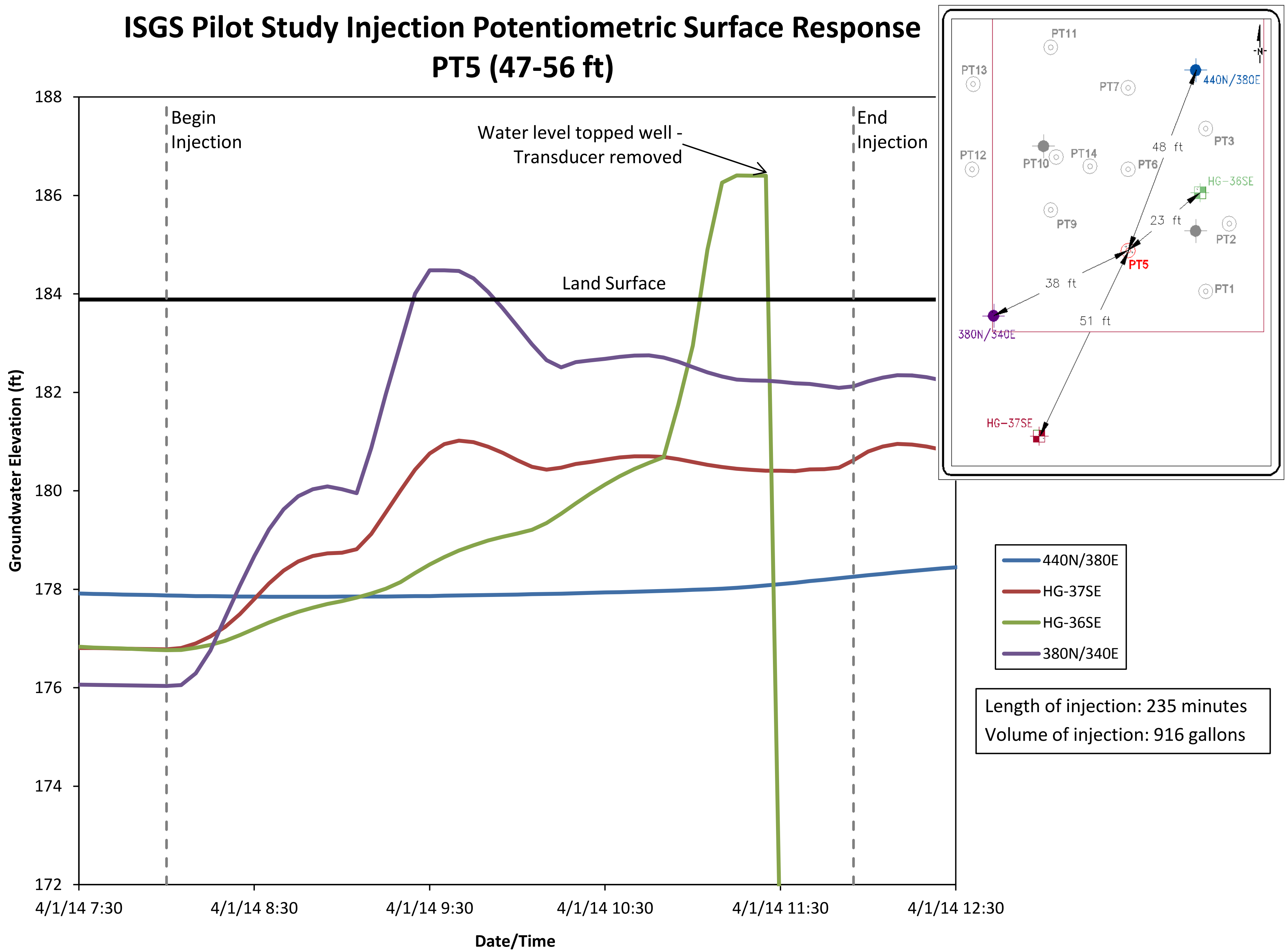
ISGS Pilot Study Injection Potentiometric Surface Response
PT10 (25-54 ft)



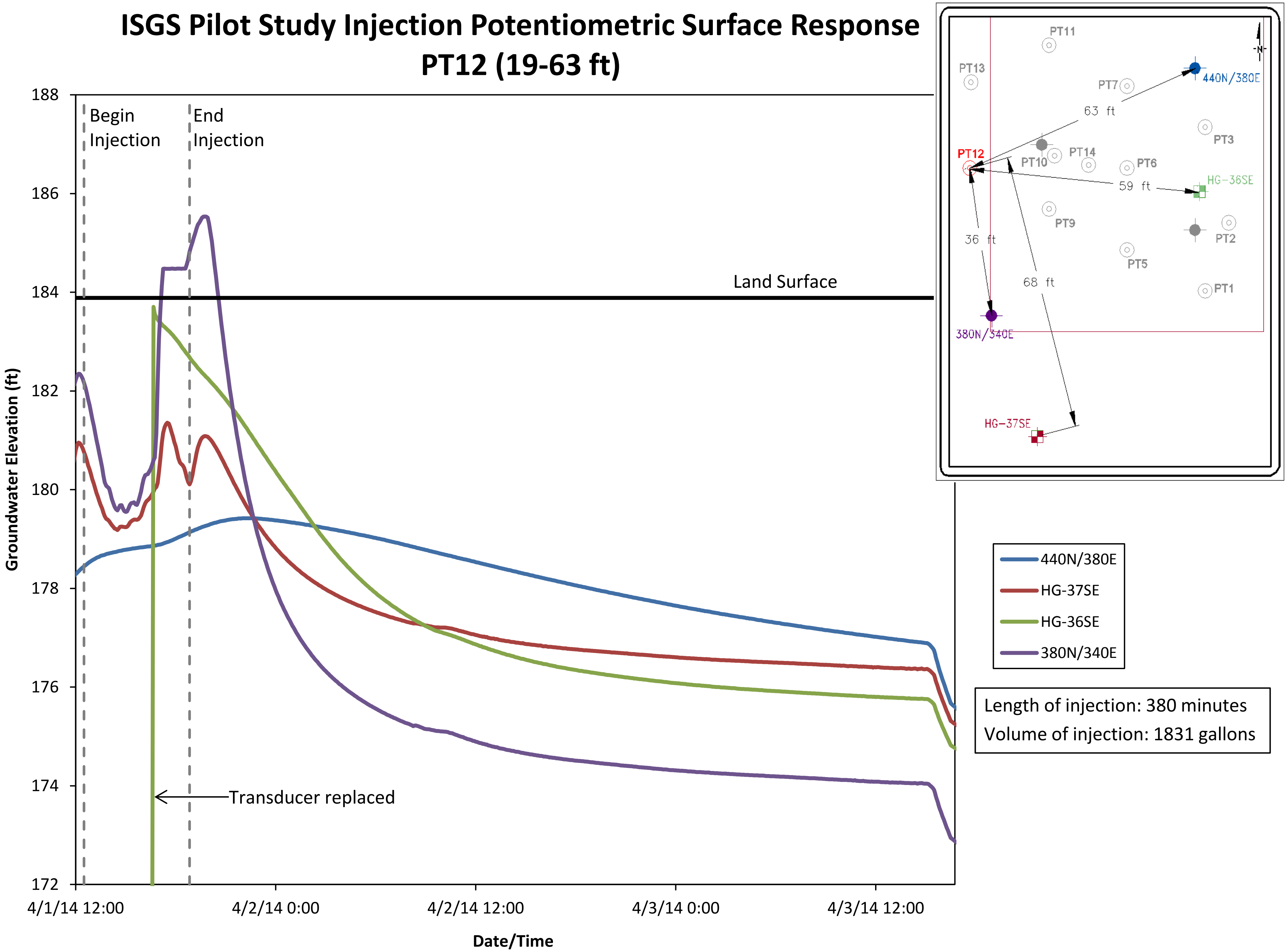
Length of injection: 245 minutes
Volume of injection: 1110 gallons

ISGS Pilot Study Injection Potentiometric Surface Response
PT5 (7-47 ft)




ISGS Pilot Study Injection Potentiometric Surface Response
PT5 (47-56 ft)
Begin Injection
Water level topped well - Transducer removed
End Injection
Land Surface
Groundwater Elevation (ft)
188
186
184
182
180
178
176
174
172
4/1/14 7:30
4/1/14 8:30
4/1/14 9:30
4/1/14 10:30
4/1/14 11:30
4/1/14 12:30
Date/Time
440N/380E
HG-37SE
HG-36SE
380N/340E
PT11
PT13
PT7
PT3
PT12
PT10
PT14
PT6
PT9
PT2
PT5
PT1
48 ft
23 ft
38 ft
51 ft
Length of injection: 235 minutes
Volume of injection: 916 gallons

ISGS Pilot Study Injection Potentiometric Surface Response
PT12 (19-63 ft)



APPENDIX E

POST-INJECTION CORE LOGS

SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TECH

Boring ID: PTL-1	Date: 6/24/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 1 of 7
Logger(s): KT JE	Start Time: 0705	Finish Time: 0808	Core Recovery (ft): 10.5

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
0				Black			
1	43	N 1			100%	GW	Black impacted Soils 0-3.5' Bgs
2							
3						SP	
4	16.3				0%		
5							
6							
7							
8	9.0					SP	
9	12.8	Y 3	100%	Reddish Brown	100%		9-10.5 mostly reddish brown; some steal colored blobs; looks like reacted
10							

1

0-8'
0
50% Recovery

1

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TECH

Boring ID: PTC-1	Date: 6/24/14	Casing / Core Dia. (in):	Core Log Sheet 2 of 7
Logger(s): KT JE	Start Time: 705	Finish Time: 808	Core Recovery (ft): 10/10 – interval from 8'-18'

Photos

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
10		Y 3	100%	Reddish Brown	100%	SP	Reddish Brown - Solid color
	16.8						
11							
12							
13							Steel blue sheen from 12.5'-13' bgs – blobs of steel blue sheen
14							
15							
	2	Y 2	50%	Lt Grey/Marbled	50%		15.5-16 Marbled color dark grey, reddish brown, steel blue Sheen
16	12.2	N 1	0%				16'+ Natural colored sands
17				Natural	0%		
	12.0						
18		N 1	0%	lt. grey blobs	30%	SP	18-22 – mostly natural sand minor grey blobs
	20.3						
19	440						
20							

Y 1
0

SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TECH

Boring ID: PTC-1	Date: 6/24/14	Casing / Core Dia. (in):		Core Log Sheet 3 of 7
Logger(s): KT		Start Time: 0705	Finish Time: 800	Core Recovery (ft):

Photos

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
20		N	0%?	Natural with grey blobs	30%	SP	
21		↓	↓	↓	↓	↓	
22		Y	100%	Reddish brown	100%		22-26 reacted DNAPL? - marbled color from 22-22.5
	44			marbled steely blue			Solid color down to top of clay @ 26 reddish brown
23				Reddish brown			
	133						
24							
25		↓	↓	↓	↓	↓	
26	28	N	0%	Natural	0%	CL	Stiff clay from 26-
27		↓	↓	↓	↓	↓	
28	44.2	Y	50%	Reddish brown along laminations	50%	CL/SC	Discoloration along sandy laminations within clay - Reddish brown
	56	↓	↓		↓	↓	appears to be reacted DNAPL
29		N	0%	↓	0%	CL	Mostly solid clay - minor stringers of reddish brown
30		↓	↓		↓	↓	< 0.1' thick @ 29.5, 30.5

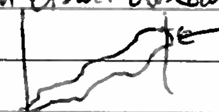
SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL   Project: 117-2201336

TETRA TECH

Boring ID: PTC-1	Date: 6/24/14	Casing / Core Dia. (in):	Core Log Sheet 4 of 7
Logger(s): KT JE	Start Time: 0705	Finish Time: 808	Core Recovery (ft): 6.5

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
30			10%				
							30.5 – stringer of reddish brown treated DNAPL
31						SC/CL	
		Y	40%			GW	gravelly clay to clayey gravel – reddish brown discoloration along fracture within gravel –
32	44.6						
33	42.4	N?	0%	Natural with Blobs of Reddish brown	30%	SC/SM	33-35 Blobs of reddish brown DNAPL within natural sand; stains bag – untreated
34	32.7						
35		No	0%	Natural	0%	SM	35-38 No discoloration
36							
37	12.8						
38		N?	0%	Mottled	50%	SM	38-38.5% discoloration
	4.4			Clean	0%		38.5-42 – No discoloration
39							
	2.9						
40							



SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201330

TETRA TECH

6/24/14 LAD 8/6/14

Boring ID: PTC-1	Date: ~~6/24/12~~	Casing / Core Dia. (in):	Core Log Sheet 5 of 7
Logger(s): KT/JE	Start Time: 0705	Finish Time: 808	Core Recovery (ft): 10/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
40		N	0%	Natural	0%		
41	0.0						
42	200.3	NZ		Reddish Brown	100%	GW	
43	6.8	N		Natural	0%	SM	
44							43-45 - No disco
45				Marbled	30%		
46	20						
47				Natural	0%		
48	202	N	0%	Marbled to discolored	50%	SM	48-52- discolored - follows lamination; Unreacted NAPL? Creosote
49	102				100%		49-50 color is solid, NAPL
50							

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SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TECH

Boring ID: PTC-1	Date: 6/24/14	Casing / Core Dia. (in):	Core Log Sheet 6 of 7
Logger(s): KT	Start Time: 705	Finish Time: 808	Core Recovery (ft): 105

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
50	70	N	6%	50%		SM	
51							
52	130			20%			
53	35						
54				0%			
55	5.7						
56						SC	
57	1.3						
58						SM	
59							
60	8.0						

SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL   Project: 117-2201336

TETRA TECH

Boring ID: PTC-1	Date: 6/24/14	Casing / Core Dia. (in): 4.75/4"	Core Log Sheet 7 of 7
Logger(s): KT	Start Time: 705	Finish Time: 808	Core Recovery (ft): 65

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
60	0.0	N	0%	Natural	0%	SM	No discoloration, all natural
61							
62							
63							
64							
65							TD = 65' bgs
66							
67							
68							
69							
70							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Tetra Tech 117-2201336
Sonic Rig - Cascade

TETRA TECH

Boring ID: PTC-2	Depth Interval (ft bgs): 0-10	Core Run Number:	Date: 6/23/14	Core Length (ft): 65	Casing/Core Dia. (in): 4.75"/4"
Core Interval Log Sheet 1 of 07	Full length Coring Time (min): 90	Logger(s): Karl Thompson	Start Time: 1500	Finish Time: 1630	Core Recovery (ft): 100%

Core Interval (feet BGS)	Drilling Rates	PID screen (ppm) internal core	Odor	Extent of NAPL 1	2	3	4	5	ISGS Reagent Present (Y/N)	% dissolution ~~NAPL Treated (%)~~	Color, Hue, Chroma (wet)	% Gravel	% Sand	%Silt	% Clay	USCS Classification	Notes:
0					X				N ↓								
1						X											
2							X			100%						GC	
										100%						GC	
3						X				0% ↓						SP	
4					X											SP	
5					X												
6					X											SP	
7					X											SP	
8					X				?	0%	Light					SP	8.5' - Dull reddish brown, mixed gravel & fines
9										100%	Dark					GW	
					X					0%	Light					SP	
10																	

1
0
5/8
0
1
0

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION, UPPER HAWTHORN GROUP
Beazer-Koppers, FL Tetra Tech 117-2201336

TETRA TECH

Boring ID: PTC-2	Depth Interval (ft bgs): 10-20	Core Run Number:	Date: 6/23/14	Core Length (ft): 65	Casing/Core Dia. (in):
Core Interval Log Sheet 2 of 07	Full length Coring Time (min): 90	Logger(s): K Thompson	Start Time: 1500	Finish Time: 1630	Core Recovery (ft): 100%

Core Interval (feet BGS)	Drilling Rates	PID screen (ppm) internal core	Odor	Extent of NAPL 1	2	3	4	5	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	% Gravel	% Sand	%Silt	% Clay	USCS Classification	Notes:
10						X			Y							SP	0.1' thick dull red, fines
									Y							↓	10-12 SP, Questionable reaction, dull red sand, marble like coloration
11																	
12									Y							SP/SM	12-16 As above darker in color marble-like color with dull red & steel blue sheen, fine sand
13									Y								
14									Y								
15									Y								
									Y								
16									N							SP	16-18 clean find sand, no NAPL or reacted Reagent present
17		2.5															
18									N							SP	18-24 SP as above, minor gray blobs (20%) in whites sand
19		3							N								
20		36															

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SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION, UPPER HAWTHORN GROUP

Beazer-Koppers, FL Tetra Tech 117-2201336

TETRA TECH

Boring ID: PTC2	Depth Interval (ft bgs): 20-30	Core Run Number:	Date: 6/23/14	Core Length (ft): 65	Casing/Core Dia. (in): 4.75"/4-inch
Core Interval Log Sheet 3 of 7	Full length Coring Time (min): 90	Logger(s): K Thompson	Start Time: 1500	Finish Time: 1630	Core Recovery (ft): 100%

Core Interval (feet BGS)	Drilling Rates	PID screen (ppm) internal core	Odor	Extent of NAPL 1	2	3	4	5	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	% Gravel	% Sand	%Silt	% Clay	USCS Classification	Notes:
20		3.0				X			N?							SP	18-24 white poorly sorted sand with minor light grey blobs (20%), smells like NAPL 2 small (≤0.1') black stringers @ 19.5' & 20.5'
21																	
22		3.5				X											
23																	
24						X			NR							SC	24-26 No sign of Dark NAPL or Dark Reagent all sand color
25																	
26				X		X feet			N							CH	26.0-27.5
27							x		Y								27- thin (<0.1') dull red (Reagent) reddish brown layer in the clay - minor Stringers of reacted DNAPL Below within the clay
28		81.0				X			Y							SP 27.5-28	27.5-28 SP Reacted NAPL - Dull grey reddish brown
29																CL	28.5-30
30																	

SOIL C[illegible]RE LOG FORM

PROCESS AREA DNAPL INVESTIGAT[illegible], UPPER HAWTHORN GROUP
Beazer-Koppers, FL Tetra Tech 117-2201336

TETRA TECH

Boring ID: PTC-2	Depth Interval (ft bgs): 30-40	Core Run Number:	Date: 6/23/14	Core Length (ft):	Casing/Core Dia. (in):
Core Interval Log Sheet 4 of 07	Full length Coring Time (min): 90	Logger(s): KT	Start Time:	Finish Time:	Core Recovery (ft): 100%

Core Interval (feet BGS)	Drilling Rates	PID screen (ppm) internal core	Odor	Extent of NAPL 1	2	3	4	5	Reacted ISGS Reagent Present (Y/N)	% discoloration NAPL Treated (%)	Discoloration? Color, Hue, Chroma (wet)	% Gravel	% Sand	%Silt	% Clay	USCS Classification	Notes:
30		3.0							Y							~~SP~~	~~18-24~~
31		18.4								3%						SC	30-31 Clay with thin Stringers of black & rusty ~~gray~~ brown reacted NAPL? Stringers? Minor <3% reacted Stringers
32					X				Y	100%						GW	31.5-33 well graded gravelly Sand with Clay Dullish reddish brown, loose
		37.2															
33				X					Y?	30%						SC	33-34 Thin Stringers of dull red within natural grey Sand ~~Colored Sand~~
34		2.4							N		No discoloration					SC	34-35 No sign of reagent
35					X												
36																	
37		43			XXe											SC	37.5-38 - minor dull reddish brown discoloration
					XXe												
38		43				X			Y?								
									N								38-41 ~~As~~ ~~KT~~ No sign of discoloration from NAPL or Reagent
39					X												
40																	

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION, UPPER HAWTHORN GROUP
Beazer-Koppers, FL Tetra Tech 117-2201336

MAD 8/6/14

TETRA TECH

Boring ID: PTC-2	Depth Interval (ft bgs):	Core Run Number:	Date: 6/23/14	Core Length (ft):	Casing/Core Dia. (in):
Core Interval Log Sheet 5 of 07	Full length Coring Time (min):	Logger(s):	Start Time:	Finish Time:	Core Recovery (ft): 100%

Core Interval (feet BGS)	Drilling Rates	PID screen (ppm) internal core	Odor	Extent of NAPL 1	2	3	4	5	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	% Gravel	% Sand	%Silt	% Clay	USCS Classification	Notes:
40									N								40-44 – No discoloration
41																	
42																	
43																	
44									Y ?	55%			90%		<10%	SM/SC	44-46.5 – Marbled discoloration Dull Reddish Brown 55% discoloration 44-45
45									Y ?	35%							35% discoloration 45-46.5
46																	46.5-47 – minor to no discoloration
47									Y ?	10% 100% 100%							47-48 – All discolored – Dull Reddish Brown
48									Y ?	40%						SM	reddish brown marbled discoloration 40%
49		30							Y?	40%						SM	
50																	

0

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0

1

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION, UPPER HAWTHORN GROUP
Beazer-Koppers, FL Tetra Tech 117-2201336

TETRA TECH

Boring ID: PTC-2	Depth Interval (ft bgs):	Core Run Number:	Date: 6/23/14	Core Length (ft):	Casing/Core Dia. (in):
Core Interval Log Sheet 6 of 7	Full length Coring Time (min): 90	Logger(s): K Thompson	Start Time:	Finish Time:	Core Recovery (ft): 100%

Core Interval (feet BGS)	Drilling Rates	PID screen (ppm) internal core	Odor	Extent of NAPL 1	2	3	4	5	ISGS Reagent Present (Y/N)	% discoloration ~~NAPL Treated~~ (%)	Color, Hue, Chroma (wet)	% Gravel	% Sand	%Silt	% Clay	USCS Classification	Notes:
50		206							Y?	80%						SM	Marble discoloration
51									Y?	80%						SM	
		116															
52									Y?	35%							
53		300							Y?	100%							
54									Y?	20%							
									Y?	20%							
55		80								15%							
										<3%							
56									N	0%							No Discoloration 56'-65'
		1.8															
57																	~~Did Not see clay layer~~
		1.3															
58																	
59		10.2															
60																	

SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION, UPPER HAWTHORN GROUP
Beazer-Koppers, FL Tetra Tech 117-2201336 LAD 8/6/14

TETRA TECH

Boring ID: PTC-2	Depth Interval (ft bgs):	Core Run Number:	Date: 6/23/14	Core Length (ft):	Casing/Core Dia. (in):
Core Interval Log Sheet 7 of 7	Full length Coring Time (min):	Logger(s): KT	Start Time:	Finish Time:	Core Recovery (ft):

Core Interval (feet BGS)	Drilling Rates	PID screen (ppm) internal core	Odor	Extent of NAPL 1	2	3	4	5	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	% Gravel	% Sand	%Silt	% Clay	USCS Classification	Notes:
0 60									N							SM	
61		3.4							N								
62		1.1															
63		0.0															
64		0.0															
65																	TD=65
66																	
67																	
68																	
69																	
70																	

SOIL RE LOG FORM

PROCESS AREA DNAPL INVESTIGATIO PPER HAWTHORN GROUP
Beazer-Koppers, FL   Project: 117-220133

TETRA TEC

Boring ID: PTC-3	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 1 of 7
Logger(s): KT	Start Time: 1400	Finish Time: 1445	Core Recovery (ft): 6/8

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
0		N	0	NR		↑	0-2 No Recovery
1				~~Black~~	~~100%~~	NR	
2				Black	100%	GW SP	
3							
4				Dark Brown	50%		
5		↓	↓	Natural	0%	SP	
6							
7							
8							
9							
10		↓	↓	↓	↓	↓	

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201330

TETRA TECH

Boring ID: PTC-3	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 2 of 7
Logger(s): KT	Start Time: 1400	Finish Time: 1445	Core Recovery (ft): 10/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
10		Y	100?	Rusty Red	100?	SP	loose Sand - Rusty Red - Most reactive to Spray - Fizzes & color change
				Marble red		SC	Silty clayey Sand, medium dense, Marbled color, mostly
11							Shades of Rusty reddish brown - Some sheeny blobs/blobs
							of sheen metallic grey; Not very reactive to Spray - Minor fizz
12							
				Dark Reddish		SP	loose Sand - Dark reddish brown
13				Brown			All reagent impacted - Not very reactive to
							Spray - Minor fizz
14							
15							
16							
							- Minor fizz & slight color change
17							10-18 Shows various levels of reaction with
							The Spray (Neutralization spray) - Rusty Red
18							Color Shows most reaction
		Y?	50%?	Natural/	50%?		
				Marbled			
19							
20							

SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TECH

Boring ID: PTC-3	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 3 of 7
Logger(s): KT	Start Time: 1400	Finish Time: 1445	Core Recovery (ft): 10/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
20		Y?	10%	Marbled light	10%	SP	loose Sand
21		Y	100%	Reddish brown	100%	↓	Reagent shows up @ 20.5' where Soils change drastically to reddish brown; turns white & fizzes with Spray
22		↓	↓	Marbled reds & browns	↓	SC/SM	medium dense silty clayey Sand - Marbled colors from Rusty Red to Reddish brown to Sheen metallic grey; white & fizzes with spray
23		N?	0%	Light grey Marbled	10%	SC	Red color disappears @ 23, Soils become stiffer / dense
24		↓	↓	↓	↓	↓	Marbled colors - light grey, green, metallic grey plastic like cohesion - Little to No staining
25							Spray = brings out oily Sheen; No fizz or color change
26				Natural	↓	SC/CL	interlaminated clays & Sand
27				↓	0%	CL	Dense Clay Natural
28		Y	100% / 10%	Black Natural / Rusty Red Natural	100% / 0%	↓	- 0.2' thick NAPL Stained Gravel lense @ 27.5' -
29		N	↓	↓	↓	↓	minor rusty red Sand laminations interlaminated with clay @ 28'
30		↓	0%	NAPL stained	100%	SC/SM	[5 NAPL rating] - 29.5'

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SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL   Project: 117-2201330

TETRA TECH

Boring ID: PTC-3	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 4 of 7
Logger(s): KT	Start Time: 1400	Finish Time: 1445	Core Recovery (ft): 10/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
30		N	0%	Natural/NAPL	50%	SM	
				NAPL Stained	90%	GW	NAPL Stained gravels - very dark waxy brown (B NAPL rating)
31							
32							
33							
				Natural	0%	SC	Creamy white colored clayey sand with black speckles (phosphate sands & lithics) with gravel - No discoloration
34							
35							
36							
37							
38							
							- NAPL Seam @ 38.5
39							
				NAPL Stained	100%	GW	- NAPL impacted gravels
40						SC	

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201330

TETRA TECH

Boring ID: PTC-3	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 5 of 7
Logger(s): KT	Start Time: 1400	Finish Time: 1445	Core Recovery (ft): 10.2/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
40		N	0%	NAPL4 Natural	10%	GW	Lense of NAPL impacted gravel @ 40
		↓	↓	↓	↓		Natural below 40.2'
41						SC/GW	↓
						SC/GW	
42				NAPL greasy yellow Brown	80%	GW	greasy yellowish brown discoloration
43		↓	↓	↓	↓	↓	
44		Y?	40%?	NAPL			44.2' thin layer of NAPL – reacts with spray – reagent?
		N	0%	Natural	10%	SC	
45				NAPL Stained	80%	GW	NAPL impacted gravels
46							No reaction to spray
47		↓	↓	↓	↓	↓	↓ Zebra Stripes of discoloration
48		Y?	30%?	Streaked with NAPL & reddish brown	30%	SC	reddish brown Streaks – discontinuous – Minor Reaction to Spray color change & fizz
		Y?	20/10%?	NAPL Stained	80%	SC	Dark NAPL stained interval 49-51 – No reaction to spray
49		↓	↓	↓	↓	↓	No Color Indication of unreacted reagent (Rusty Red)
50							

SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201338

TETRA TECH

Boring ID: PTC-3	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 6 of 7
Logger(s): KT	Start Time: 1400	Finish Time: 1445	Core Recovery (ft): ~~10.0~~ 11/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	~~orange~~ NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
50		Y?	10%?	NAPL Stained	80%	SM/SC	~~Rusty re~~
51		Y	80%	NAPL & Rusty Red & Natural	60%		Rusty Red stained matrix appears with the NAPL Natural Sand matrix; doesn't follow bedding planes, Migrates vertically throughout core following NAPL
53			40%		50%		
54			80%		40%		Rusty Red Reacts with Spray - Fizzes & dissappears
56					80%		
58		Y	100%	Rusty Red & Black NAPL	100%		Black NAPL surrounded by Rusty Red Reagent Reagent is following vertical flow paths of NAPL
60							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL   Project: 117-22013[illegible]

TETRA TECH

Boring ID: PTC-3	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 7 of 7
Logger(s): KT	Start Time:	Finish Time:	Core Recovery (ft):

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
60		Y	100%	Rusty Red/NAPL Natural	80%	SM	
61					50%		The NAPL is surrounded by Rusty Red unreacted reagent The Rusty Red is a Rind around the NAPL
62							
63					100%		
64							
65							
66							
67							
68							
69							
70							

SOIL ORE LOG FORM

PROCESS AREA DNAPL INVESTIGATIO PPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TEC

Boring ID: PTC-4	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 1 of 7
Logger(s): KT	Start Time: 1340	Finish Time:	Core Recovery (ft): 0-8 4.5/8'

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
0	0	N	0	Black	100%	GW	Black Stained Surface Soils
1	0					SP	
2	0			Lightly Stained	80%		
3				Natural	0%		Natural colored sands, loose damp
4	0						
5							
6	0						
7							
8	0						
9							
10		Y	100%	Dark Reddish Black purple?	100%		9.5-18 dark purple Sands

D

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL   Project: 117-2201330

TETRA TECH

Boring ID: PTC-4	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 2 of 7
Logger(s): KT	Start Time: 1340	Finish Time:	Core Recovery (ft): 9.3/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
10	0	Y	100%	Dark reddish Black (Purple?)	100%	SP	purple sands, loose
11							
	0						
12							
	0						
13							
	0						
14							
	0						
15							
16	0						
17							
	0						
18							
19							
20							

SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201330

TETRA TECH

Boring ID: PTC-4	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 3 of 7
Logger(s): KT	Start Time: 1340	Finish Time:	Core Recovery (ft): 10.3'/10'

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
20	0	Y	100%	Dark Reddish Black	100%		
	0						
21							
	0	N	0%	Natural	0%		
22				Marbled to		SM	plastic like cohesion, silty sands, Marbled color, No sheen
	1.3			Natural			
23							
24							
	3.7						
25						CL/SC	
					5%	CL	minor purple staining in clay layer
26							
							thin Napl colored stringer
27	70			NAPL Staining	50%	CL/SC	
				Natural	0%		
28	70	N	0%	Stained	100%	GM/CL	clayey gravel stained with NAPL (Level 4)
29	[illegible]						
30					80%		

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TECH

Boring ID: PTC-4	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 4 of 7
Logger(s): KT	Start Time: 1340	Finish Time: 1430	Core Recovery (ft): 10/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
30	5.0	N	0	Natural	0%	SM/SC	Silty clayey Sand with black phosphate lithics
							No discoloration of Seds
31							Creamy white color
32							
33	7.7						
34							
35	2.2						
36							
	10.9						
37	113			Stained	100%	GM/GW	clayey gravel - Stained with NAPL
							No reaction to Spray (Neutralization fluid)
38				Natural	0%	SM	Silty clayey Sand, Creamy white with black lithics (coarse angular phosphate)
	0.0						
39							
40							

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SOIL [illegible]RE LOG FORM

PROCESS AREA DNAPL INVESTIGATIO[illegible]PPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-220133[illegible]

TETRA TEC[illegible]

Boring ID: PTC-4	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 5 of 7
Logger(s): KT	Start Time: 1340	Finish Time: 1430	Core Recovery (ft): 10.2/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
40	0.8	N	0%	Natural	0%	SM/SC	
41	153			Stained NAPL	100%	GM	Gravelly Clay Stained @ 41-41.5; reacted to the neutralization spray
				Natural	0%	SM/SC	
42	1.1						
43							
44	13						
45	91			Stained	50%		Gravelly clays stained @ 44.5' & 45.8', 46.5', 47.8'. No reaction to Spray
46	150						
47	0.6			Natural	0%		
48				Stained	100%	SM	Stained Soils decreasing with depth from 48 to 53
49	80						
50							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TECH

Boring ID: PTC-4	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 6 of 7
Logger(s): KT	Start Time: 1340	Finish Time: 1430	Core Recovery (ft): 10.5/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
50	148	N	0%	Stained	90%	SM	decreased NAPL staining with depth
	105						No visual indication of Reagent
51		Y?			50%		
							plastic like cohesion from 51 to 58 (reacted NAPL?)
52	60				10%		~~possibly ...~~ e
53				Natural	0%		
	0.0						
54							
	0.0						
55							
56	0.0						
57							
	0.0						
58		N					
59							
60							

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SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201330

TETRA TECH

Boring ID: PTC-4	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 7 of 7
Logger(s): KT	Start Time: 1340	Finish Time: 1430	Core Recovery (ft): 6/~~7~~'

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
60		N	0	Natural	0%	SM	No discoloration or Staining Darker color than creamy white/more brown
61							
62							
63							
64							
65							TD=65
66							
67							
68							
69							
70							

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SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-220133

TETRA TECH

Boring ID: PTC-5	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 1 of 7
Logger(s): KT	Start Time: 1015	Finish Time: 1100	Core Recovery (ft): 5/8

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
0	0.0	N	0	Black	100%	SP	
1							
2	0.0						
3				? Brown Stained	100%		
4	0.0			Natural			
5					50%		
6	0.0			Natural	0%		
7							
8	0.0						
9							
10							

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SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION – UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201338

TETRA TECH

Boring ID: PTC-5	Date: 6/25/14	Casing / Core Dia. (in): 4.75/4"			Core Log Sheet 2 of 7	
Logger(s): KT		Start Time: 1015	Finish Time: 1100		Core Recovery (ft): 9/10	

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
10	0.0	Y?	100%?	Dark Reddish Black	100%	SP	loose saturated sand stained dark black with a red tint from 10-28; ~~loose saturated sand~~ 10'-28'
11	0.0						
12							
13	0.0						
14	0.0						
15	0.0						
16	0.0						
17	0.0						
18	0.0						
19							
20							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL   Project: 117-2201336

TETRA TECH

Boring ID: PTC-5	Date: 6/25/14	Casing / Core Dia. (in): 4.25/4"	Core Log Sheet 3 of 7
Logger(s): KT	Start Time: 1015	Finish Time: 1100	Core Recovery (ft): 6/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
20	0	Y?	100%?	Dark Reddish Black	100%	SP	As above to 28 All looks like permanganate Stains gloves purple
21	0						
22	0						
23	0						
24	0						
25	0						
26	0						
27	0						
28			30%?	Lighter gray, Cream colored Native			
29		N			50%	SM/SC	Change from poorly graded saturated sands to silty clayey sands Contrast in color to creamy white with black phosphate lithics MISSING Clay Layer
30							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TECH

Boring ID: PTC-5	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 4 of 7
Logger(s): KT	Start Time: 1015	Finish Time: 1100	Core Recovery (ft): 10/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
30	0	N	0%	Natural	0%	SC	
31	0						
32	0						
	31						
33							
34							
	28						
35							
	68.3			Stained	30%		Minor Seams of Stained core
36				Natural	0%		
	10.3						
37	59.9			Stained	50%	GW	Napl Stained gravelly clay - clayey gravel with sand
	68.8						
38				Natural	0%	SC	
							- one stained lense @ 38.5
39							
40							

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SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TECH

Boring ID: PTC-5	Date: 6/25/14	Casing / Core Dia. (in): 4.75/4"	Core Log Sheet 5 of 7
Logger(s): KT	Start Time: 1015	Finish Time: 1100	Core Recovery (ft): 11/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
40	6.1	N	0%	Natural		SC	
41				Stained		~~SC GW~~	GRAVEL Lenses have NAPL Staining; No visual indication of Reagent
42	195				100%	GW	Reaction to Neutralization Spray from 41.5 to 43
					100%		changes from an oily brown color to creamy white
43				Natural	0%	SC	Stains gloves a brown NAPL color - Higher PID reading
44	12.8			light grey Stain	100%		
45				Stained	100%	GW	
	114				30%	SC	
46							
47					100%	GW	
48	66				30%	SC	
					90-100%	SM	
49							
50							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-220133[illegible]

TETRA TECH

Boring ID: FTC-5	Date: 6/25/14	Casing / Core Dia. (in): 4.75/4	Core Log Sheet 6 of 7
Logger(s): KT	Start Time: 1015	Finish Time: 1100	Core Recovery (ft): 11.3/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
50	191	N	0	Stained dark brown NAPL	80%	SM	very stained & less staining with depth from 48 to 54; below 54 it looks natural with a possible darker color than the creamy white
51							
	170				50%		
52					60%		No Reaction to Neutralization Spray
53	140				10%		
54							
				Natural(?)	0%		
	0						
55							
56							
57							
	0						
58	0						
59	0						
60	0						

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL   Project: 117-2201330

TETRA TECH

Boring ID: PTC-5	Date: 6/25/14	Casing / Core Dia. (in): 4.75/4	Core Log Sheet 7 of 7
Logger(s): KT	Start Time: 1015	Finish Time: 1100	Core Recovery (ft): 6/7

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
60	0	N	0%	Natural	0%	SM	No Staining - all Natural silty sand
		↓	↓	↓	↓	↓	May be a little darker than the creamy white;
61							looks a bit greyer.
62	0						
63							
64							
	0	↓	↓	↓	↓	↓	
65							TD=65
66							
67							
68							
69							
70							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TECH

Boring ID: PTC-6	Date: 6/25/14	Casing / Core Dia. (in): 4.75/4	Core Log Sheet 1 of 7
Logger(s): KT	Start Time: 0740	Finish Time: 930	Core Recovery (ft): 5/8

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
0		N	0%	Natural		GW	
1							
2				Black	100%		
				Stained Brown			
3	97.6					SP	
4							
5							
6							
7	36						
8				Stained dark Brown	100%	SP	
9							
10							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201338

TETRA TECH

Boring ID: PTC-6	Date: 6/25/14	Casing / Core Dia. (in): 4.75/4	Core Log Sheet 2 of 7
Logger(s): KT	Start Time: 0740	Finish Time: 930	Core Recovery (ft): 10/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
10	35.8	N	0	Stained Brown	100%	SP	8-11 – all Sand has a sheen; PID is higher MORE GREY
11	2.0	Y?	Y?	Marbled color			11-20 Mostly dark brown to dark reddish brown. MORE RED Color becomes marbled with blobs of metallic sheen (steel grey) – the sheen part becomes oily when sprayed with Neutralization Solution
12	1.8						
13							
14	0.6						Could be a water table feature – LNAPL on top with reacted sands below – Sands are loose
15							
16	0.1						
17	0.0						
18							
19							
20	0.0						

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201338

TETRA TECH

Boring ID: PTC-6	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 3 of 7
Logger(s): KT	Start Time: 0740	Finish Time: 930	Core Recovery (ft): 10/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
20		Y?	100?	Marbled Reddish brown Stained	100?	SP	
21	0.3						
22	97.8	Y?	30?	Marbled with Some Native	50?	SM	Transitions to a siltier Sand, ~~less~~ More Cohesive, marbled Color with oily Sheen, nat. sand & reddish brown, not as dark; Cohesion is not loose, not brittle, breaks in a more plastic manner
23	22.2					SC	
24	0	N	0?	Natural	0%	SC/CL CL	
25							
26							
27	77	~~Yes~~	100%	Rusty red brown	100%		0.1' thick lense of Rusty reddish brown Sand - Appears treated due to Rusty red Color from Iron
28	0	NO	0%	Natural	0%		
29						CL/SC	Base of clay - shift in color from Red Brown Sands to Creamy White Sands with clay & black phosphatic Lithics
30							

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SOIL [illegible]RE LOG FORM

PROCESS AREA DNAPL INVESTIGATIO[illegible]PPER HAWTHORN GROUP
Beazer-Koppers, FL   Project: 117-220133[illegible]

TETRA TEC[illegible]

Boring ID: PTC-6	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 4 of 7
Logger(s): KT	Start Time: 0740	Finish Time: 930	Core Recovery (ft): 10.5/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
30	51.5	N	0%	oily sheen	100%	GW	
	43.6	Y?	50%?	Dark Brown with red tar			
31							
	64.7						
32		N	0%	dark gray stain	100%	SW/SC	with gravel to 37 Clay, Sand, Shells
				Natural	0%		
33	0.0						
34							
35							
	0.0						
36							
37						GW	
	0.0						
38						SC	
39							
40							

SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201335

TETRA TECH

Boring ID: PTC-6	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 5 of 7
Logger(s): KT	Start Time: 0740	Finish Time: 930	Core Recovery (ft): 11/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
40		N	0%	Natural	0%	SC	
41							
	0						
42	71			Stained	100%	GW	gravel lense
				Natural	0%	SC	
43	13						
44	51			Stained	100%	GW	
				30% Stained	30%		
45						SM	Silty Sands with gravel Stained intervals along gravel lenses @ 46.5, 47, 48
46	23.8						
47	46			Stained Natural Stained			
48	88	N	0%	Stained	90-100%		very stained sands
49							
50							

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0
1

SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201338

TETRA TECH

Boring ID: PTC-6	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 6 of 7
Logger(s): KT	Start Time: 0740	Finish Time: 0930	Core Recovery (ft): 10/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
50	141	N?	0%	Stained dark brown	90-100%	SM	Staining of sand decreases ~~xxx~~ with depth The stained portions do not react with Neutralization fluid – No reagent present The most stained part from 48-51 appears to have a slight red tint – questionable reaction
51	149				80%		
52					50%		
53				Partial Staining	30%		
54	75				30%		
55					30%		
56		N		Natural	0%		
57	0.0						
58						SM	
59							
60							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201338

TETRA TECH

Boring ID: PTC-6	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 7 of 7
Logger(s): KT	Start Time: 0740 / Finish Time: 0930		Core Recovery (ft): 7/7

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
60	0.0	N	0	Natural to partly Stained	0%	SM	As above silty sands, darker color (Not as light & cream colored) could be stained evenly throughout; No visual indication of Reagent; The core breaks apart in a more plastic way - Not a loose Sand, Some cohesion.
61	0.0						
62	0.0						
63	0.0						
64	0.0						
	0.0						
65							TD=65
66							
67							
68							
69							
70							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201330

TETRA TECH

Boring ID: PT-7	Date: 6/24/14	Casing / Core Dia. (in): 4.75"/4-inch	Core Log Sheet 1 of 7
Logger(s): KT	Start Time: 0945	Finish Time: 1030	Core Recovery (ft): 6.5

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
0		N	0%	Black	100%	GW	Black surficial gravels & soils
1							
2	120						
3						SP	
4				Brown	0%	SP	Brown Sand
5	160						
6							
7							
8	200						
	185						
9	107					SM	
10							

0-8
50%

SOIL [hole punch]ORE LOG FORM

PROCESS AREA DNAPL INVESTIGATIO[hole punch]PPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201338

TETRA TEC

Boring ID: PTC-7		Date: 6/24/14		Casing / Core Dia. (in): 4.75"/4"		Core Log Sheet 2 of 7	
Logger(s): KT/JE			Start Time: 0945		Finish Time: 1030	Core Recovery (ft): 6.5	

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
10		Y?	20%?	Natural	20%	SM	9-10.3 minor stringers of orange
	28.8	Y	100%	Dark dull reddish brown	100%	↓	10.3-10.7 – Dark dull reddish brown with some steely blue blobs - Seam of reacted DNAPL
11		Y?	20%?	Natural with orange	20%		
		↓		↓	↓	↓	11-12 [minor stringers of orange discoloration isolated to thin laminations ISGS?] - Same from 9-10.3
12		N	0%	Some dark grey Staining	80%	SP	
13	44						12-16 Darker colored Sand marbled
14	48.2						
15	23.2			↓	↓		
16	18.6			Natural	0%		
17	25.8			Some dark grey Staining	80%		
18	19	↓	↓	Natural	0%	↓	
19	25	↓	↓	↓	↓	↓	
20							

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SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TECH

Boring ID: PTC-7	Date: 6/24/14	Casing / Core Dia. (in): 4/		Core Log Sheet 3 of 7		
Logger(s): KT/JE	Start Time: 0945	Finish Time: 1030		Core Recovery (ft): 6.5		

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
20		N	0%	Natural	0%	SP	
	28	↓	↓	↓	↓	↓	
21		Y? N					
22		Y?	100%?	Solid reddish brown	100%		21.5 - thin (< 0.1') seam of metallic sheen steel grey 22-25 - solid reddish brown color - Reagent? consistency seems a little firmer - Unclear
23		↓	↓	↓	↓		
24							
25	390			laminations of reddish Brown	50%	↓	25-27 Solid reddish Brown color from above along Sandy laminations
26			↓		↓	SC	
27			0%	Natural	0%	CL	27-27.5 Natural clay dense
28		↓	100% in laminations	Seems of Reagent?	50%	↓	27.5-28 - Treated NAPL? in clay - Reddish Brown Sprayed with Neutralization Solution & the Reddish Brown color changed abruptly to the Natural Clay color
						SC	
29		↓	↓	↓	↓	↓	
		↓	0%	Natural	0%	GW	
30		↓	↓	↓			

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SOIL ORE LOG FORM

PROCESS AREA DNAPL INVESTIGATIO PPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-220133

TETRA TEC

Boring ID: PTC-7	Date: 6/24/14	Casing / Core Dia. (in): 4.75/4	Core Log Sheet 4 of 7
Logger(s): KT	Start Time: 0945	Finish Time: 1030	Core Recovery (ft): 65

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
30		N	0%	Natural with Stain	20%	GW	gravel, sand, fines, NAPL – No indication of treated 30-38
		↓	↓	Staining	↓		except along thin seams @ 31' < 0.1' thick
31				Natural	0%	SW	gravelly sand with fines
	46			↓	↓	↓	30-38 looks like cookies & cream
32	413			Staining	60%		
	40			Natural	0%		
33				↓	↓		
34						SM	
35	38			↓	↓	↓	
	488			~~80%~~ Stain	80%		
				Nat	↓		
36	92			~~20~~ Natural	0%		
37				↓	↓		
38		↓	↓	↓	↓	SM	
39						↓	
40		↓	↓	↓	↓	↓	

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TECH

Boring ID: PTC-7	Date: 6/24	Casing / Core Dia. (in): 4.75" / 4"	Core Log Sheet 5 of 7
Logger(s): KT JE	Start Time: 945	Finish Time: 1030	Core Recovery (ft): 10/10

	Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
0	40	36	N	0%	Natural	0%	SM	
	41							
		70						
1	42	820			~~Stained Red NAPL~~		GW	NAPL in gravel - Staining not very apparent
0	43				Natural		SC	
1	44	420			NAPL		GW	NAPL stained gravel - Staining not very apparent
1	45	161	Y	100%	Rusty Red	100%	SC	45-45.5 Rusty Red Reagent Reacted NAPL; Changes color with Neutralization Spray back to natural color Rusty Red doesn't follow laminations
0	46		N	0%	Natural	0%	SM	
	47							
1	48	586		0%		100%		47.8-48 - DNAPL - darker brown color
		1174	N		Dark grayish red	90%		48-53 - Dark stained core Mostly dark grey with a slight rusty tinge to the color - ~~could be partially reacted~~ No indication of Reagent; NAPL 3-4 rating
	49							
	50							

SOIL [illegible]ORE LOG FORM

PROCESS AREA DNAPL INVESTIGATIO[illegible] [illegible]PPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TEC[illegible]

Boring ID: PTC-7	Date: 6/24/14	Casing / Core Dia. (in):	Core Log Sheet 6 of 7
Logger(s): KT	Start Time: 0945	Finish Time: 1030	Core Recovery (ft): 48-58 13ft of core

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes: ~~Adjust~~ #ing 48'-~~55~~'60' 58'-6~~8~~5' recovery is 5' of core
50	719	N	0%	Stained	100%	SM	
51							
52							
53	676			Natural	0%		No Staining from 53'-58' to 65'
54	115						
55							
56	135						
57							
58							
59	19.5						
60							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-220133

TETRA TECH

Boring ID: PTC-7	Date: 6/24/14	Casing / Core Dia. (in): 4.75/4	Core Log Sheet 7 of 7
Logger(s): KT	Start Time: 0945	Finish Time: 1030	Core Recovery (ft): 65

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
60		N	0%	Natural	0%	SM	
	16.3						No staining to 65'
61							
62							
	384						
63							
64							
65							
							TD=65'
66							
67							
68							
69							
70							

SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201330

TETRA TECH

Boring ID: PTC-8	Date: 6/24/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 1 of 7
Logger(s): KT	Start Time: 1435	Finish Time: 1530	Core Recovery (ft): from 0 to 8, 4' recovery

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
0		N	0%	BLACK	100%	GV	
1							
2	73						
3							
4				Dark Brown (Stained)	100%	SP	
5							
6	307						
7							
8	1046	N	0%	Natural	0%	SM	8 - 11 No discoloration
9							
10							

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SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201330

TETRA TECH

Boring ID: PTC-8	Date: 6/24/14	Casing / Core Dia. (in): 4.75/4	Core Log Sheet 2 of 7
Logger(s): KT	Start Time: 1435	Finish Time: 1530	Core Recovery (ft): 6.5

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
10		N	0%	Natural	0%	SM	
11	256			Stained grey	100%		11
12							
13							
14		NR		NR		NR	No Recovery 12-18
15							
16							
17							
18	104	N	0%	Natural	0%	SP	
19							19.5 - black looking Stringers (< 0.1' thick) - Natural?
20							

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SOIL [hole punch] ORE LOG FORM

PROCESS AREA DNAPL INVESTIGATIO[hole punch] PPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TEC

6/24/14 LAD 8/6/14

Boring ID: PTC-8	Date: ~~4/26/14~~	Casing / Core Dia. (in): 4.75	Core Log Sheet 3 of 7
Logger(s): KT JE	Start Time: 1435	Finish Time: 1530	Core Recovery (ft):

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
20		N	6%	Natural		SP	
21		Y?	80%	Stained Marbled Colors	90%		21-27 – marbled coloration from grey, brown, light tan plastic-like cohesion – Reacted Napl?
22							
23							
24	312						
25							
26	301						
27		Y	50%		50%	CL/SL	Discrete interval of unreacted reagent through top of Clay – laminated clays/sands
28		Y				CL	purple unreacted Reagent @ 28.5 along laminations – Neutralization fluid makes it change color
29							
30							

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SOIL ORE LOG FORM PROCESS AREA DNAPL INVESTIGATIO PPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201330

TETRA TEC

6/24/14 LAD 8/6/14

Boring ID: PTC-8	Date: ~~4/26/14~~	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 4 of 7
Logger(s): KT JE	Start Time: 1435	Finish Time: 1530	Core Recovery (ft): 10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
30	385	Y	50%	interlaminated Natural & purple	50%	CL/SC	purple laminations within Natural clay & sand, half Napl & half Unreacted reagent
31	307			Dark Steelgy	100%	GM	31-32 ~~partially treated~~ NAPL & Reagent present
32		N	0%	NAtural	0%		No discoloration 32-33
33	540	Y	50%	Dark Steelgry & Brown	100%		33-34.5 ~~partially Treated~~ NAPL & Reagent present
34						SM	
35		N	0% 0%	Natural Natural	0%		34.5 to 38 Natural - No discoloration
36							
37	31						
38						SC	
39	17						
40							

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SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201338

TETRA TECH

6/24/14 LAD 8/8/14

Boring ID: PTC-8	Date: ~~4/26/14~~	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 5 of 7
Logger(s): KT/JE	Start Time: 1435	Finish Time: 1530	Core Recovery (ft): 10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
0 40		N	0	Natural	0%	SC	
41		↓		↓	↓	↓	
	218	↓		↓	↓	↓	
1 42		Y?		light dull brown	20%	GM	gravelly clay @ 42 - thin area of discoloration, Reagent present ?
	102	N		Stained grey	100%	SC	
43		↓		↓	↓	↓	
44		Y?		light dull brown	20%	GM	gravelly clay with sand @ 44 - thin area of discoloration
		N			↓	SM	
45		↓	↓		100%		
	800	Y?	50%	Dark Brown	30%		Reagent & NAPL present in thin zone (0.2' thick) @ 45.8' - Somewhat reactive to Neoretro spray
0 46		N	0%	Natural			40-48 mostly natural color with blobs of dark brown
0		↓	↓	↓	↓	↓	Staining core - NAPL.
47		↓	↓	↓	↓	↓	
1 48			0%	Dark Brown Staining	100%	SM	
49	1200	↓	↓	↓	↓	↓	
50		↓	↓	↓	↓	↓	

SOIL CORE LOG FORM — PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TECH

6/24/14 CAD 8/6/14

Boring ID: PTC-8	Date: ~~4/26/14~~	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 6 of 7
Logger(s): KT / JE	Start Time: 1435	Finish Time: 1530	Core Recovery (ft): 13' from 48 to 58'

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
50		N	0%	Dark Brown	100%	SM	All Stained to 52'
51							
52	410			Marbled Dark Brown Staining & Natural	50%		Marbled Dark brown NAPL Staining & Natural color No reaction with Neutralization Spray
53							
54	340						
55				Natural	0%		55'-58' No Staining
56							
57							
58	19.5						
59	12.7						
60							

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SOIL [hole punch]ORE LOG FORM

PROCESS AREA DNAPL INVESTIGATIO[hole punch]PPER HAWTHORN GROUP
Beazer-Koppers, FL   Project: 117-2201336

TETRA TEC[hole punch]

Boring ID: PTC-8		Date: ~~4/26/14~~ 6/24/14 LAD 8/6/14		Casing / Core Dia. (in): 4.75" / 4"		Core Log Sheet 7 of 7	
Logger(s): KT/JE		Start Time: 1435		Finish Time: 1530		Core Recovery (ft): 6	

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
60		N	0%	Natural	0%	SM	No staining from 58'-64' bgs
61		↓	↓	↓	↓	↓	
62	0						
63							
64							TD=64'
65							
66							
67							
68							
69							
70							

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SOIL [hole-punched]ORE LOG FORM

PROCESS AREA DNAPL INVESTIGATIO[hole-punched]PPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TEC[hole-punched]

Boring ID: PTC-9	Date: 6/26/14	Casing / Core Dia. (in): 4.75/4"	Core Log Sheet 1 of ~~10~~ 7 LAD 8/6/14
Logger(s): KT	Start Time: 1040	Finish Time: 1130	Core Recovery (ft): 10/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
0							
1							
2				NR			0 - 4 No Recovery
3							
4		N	0	BLACK	100%	GW	
5						SP	
6				Light Brown	Natural		
7							
8		Y?	?	Reddish Brown	Reagent?		Rusty red/Reddish Brown loose Sand @ 7.5
9						NR	8-11 No Recovery; Continues @ 11'
10							

NR
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Nothing
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SOIL [hole-punch] RE LOG FORM PROCESS AREA DNAPL INVESTIGATIO[hole-punch] PPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-220133[hole-punch]

TETRA TECH

Boring ID: PTC-9	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 2 of 7
Logger(s): KT	Start Time: 1840	Finish Time: 1130	Core Recovery (ft): 10/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
10					NR ↓		NR ↓
11		Y ↓	100% ↓	Rusty Red ↓	100% ↓	SP ↓	11-12.5 Rusty Red loose Sand – Reagent; Reacts well with Spray. Fizzes & changes color
12							
13				purple-ish tint ↓		SC ↓	12.5 to 18 has a purpilish hue ~~but does not~~ reacts with Spray. Minor blob of red @ 14' ~~for~~ Fizzes but doesn't change color from Spray Reacted Reagent?
14							
15							Marbled color – plastic like cohesion This is the tight Sands that have a clay mixture & take on a marble like color
16							
17							
18		↓	80% ↓	light purple ↓	80% ↓	SP ↓	
19						SM ↓	
20							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL   Project: 117-2201[illegible]

TETRA TECH

Boring ID: PTC-9		Date: 6/26/14		Casing / Core Dia. (in): 4.75"/4"		Core Log Sheet 3 of 7	
Logger(s): KT		Start Time: 1040		Finish Time: 1130		Core Recovery (ft): 10/10	

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
20		Y	100%	Purple/ Dark Red	100%	SM	20-28 is discolored silty Sands in various Colors from dark reddish black (purple) to light purple. The different colors are likely NAPL @ various Stages of Reaction
							20-21' - there are Some blobs with a steel grey Sheen - reacted Strongly to Spray
21							
22							
23							
24							The Plastic bag is Stained with NAPL
25							
26						SC	
27							
28							
29		Y/N	10%	Natural	10%	CL	28.5-31 - CL to SC Interbedded, Minor purple Staining
						CL/SC	
30							

SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201330

TETRA TECH

Boring ID: PTC-9	Date: 6/26/14	Casing / Core Dia. (in): 4.75/4"	Core Log Sheet 4 of 7
Logger(s): KT	Start Time: 1040	Finish Time: 1130	Core Recovery (ft): 10/10

	Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
0	30		N?	0	Natural	10%	CL/SC	
	31							Geology change to the creamy white clayey gravels & sands
1			N		NAPL Stained	100%	GW	No color changes suggesting Reagent present
	32					100%	GW	
0						10%	SC	No Reaction to Spray
	33				Natural			
1					Stained NAPL	100%		
	34							
							GW	
	35						SC	
	36							
					NAPL/Natural	50%		50% NAPL along laminations
	37							
	38							
0			N	0	Natural	0%	SC	
	39							
	40							

SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201330

TETRA TECH

Boring ID: PTC-9	Date: 6/26/14	Casing / Core Dia. (in):	Core Log Sheet 5 of 7
Logger(s): KT	Start Time: 1040	Finish Time: 1130	Core Recovery (ft): 10/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
40		N	0	Natural	0%	SC	Sandy clays with gravel
41							
42							
43							@ 43' the creamy whitish matrix gets a tint darker from staining
44							
45						GW	
						SC	
46		Y	80%	Rusty Red	100%		Reagent present @ 45.5 & 47; rusty red blobs filling the clayey sandy matrix
			10%	Natural NAPL Stain	50%		Reacts with Spray = fizzes & changes color to natural colors
47			80%	Rusty Red	80%		
				NAPL Stain		GW	
48		N?	N?	NAPL Stain	100%	SC/SM	from 48 to 54 - NAPL Stained Soils - decrease with Depth. No obvious Rusty Red Staining
49							
50							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201338

TETRA TECH

Boring ID: PTC-9	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 6 of 7	
Logger(s): KT	Start Time: 1040	Finish Time: 1130	Core Recovery (ft): ~~6/7e~~ 10/10	

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
50		N?	?	NAPL Stained	100%	SC/SM	(see previous page)
51							No Unreacted reagent (Rusty Red) present
52					70%		
53					50%		
54		Y	10%	Mostly Natural Minor rusty red	0-10%	SC	54-59.5 Mostly Natural colored soils, occassional Rusty Red Unreacted reagent; Not continuous along bedding; mostly discontinuous blobs.
55							
56							
57							
58							
59							
60		N?	0%?	Natural	0%		No discoloration from 59.5-65' bgs

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SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201330

TETRA TECH

Boring ID: PTC-9	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 7 of 7
Logger(s): KT	Start Time: 1040	Finish Time: 1130	Core Recovery (ft): 6/7

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
60		N	0	Natural	0%	SC/SM	
61		↓	↓	↓	↓	↓	
62							
63							
64							
65							TD = 65'
66							
67							
68							
69							
70							

SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201338

TETRA TECH

Boring ID: PTC-10	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 1 of 7
Logger(s): KT	Start Time: 1545	Finish Time: 1640	Core Recovery (ft): 0-8

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
0		N	0	Black	100%	GW	
1						SP	
2	0						
3				Dark Brown			
4	0			Natural	0%		
5							
6	0						
7							
8	0						
9	0						
10	0						

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SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201330

TETRA TECH

Boring ID: PTC-10		Date: 6/25/14		Casing / Core Dia. (in): 4.75" / 4"		Core Log Sheet 2 of 7	
Logger(s): KT		Start Time: 1545		Finish Time: 1640		Core Recovery (ft): 8.5/10	

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
10	0	N	0?	Natural	0?	SP	
		↓	↓		↓	↓	
11							
		Y?	?			SC	Consistency begins to stiffen; plastic like cohesion
	0						~~Marble like color~~; mixed sands & clays, color
12							of clay is green & sand is light brown - marble like
							mixture No Staining;
13							The plastic like cohesion is unnatural feeling
	0						Maybe reagent - No color change indicating
14							reagent present; Reacted NAPL?
15							
16							
	0						
17							
						SP	Clean Sand from 17-20
	0	↓	↓	↓	↓	↓	
18							
	0						
19							Saturated
20		↓	↓	Staining Oily sheen	↓	↓	Oily sheen from 19-20

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL   Project: 117-2201330

TETRA TECH

Boring ID: PTC-10	Date: 6/25/14	Casing / Core Dia. (in): 4.75" / 4"	Core Log Sheet 3 of 7
Logger(s): KT	Start Time: 1545 / Finish Time: 1640		Core Recovery (ft): 10/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
20		?	?	Marble with Staining	10%	SM	laminated clayey silty sands ; Mostly brown with blobs of steel grey & blobs of sheen No purple color or indication of unreacted reagent
21							
22							
23	0.9						
24							
25	42.0						
26	20					CL/SM	
27	57	Y?	50%?	Black Staining	100%		26.5-27 - dark black staining - No color reaction to spray - lots of fizzing
		N	0	Natural	10%		- Sheen on surface - NAPL - Dark brown streak on plastic
28	2.3						
				Natural	0%	SC	Creamy white clayey silty sands with black phosphate lithics
29	0.0						
30	76.3			Stained	100%	GW	Napl stained gravel lense from 29.8-30.2

0
1
0
1

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-22013

TETRA TECH

Boring ID: PTC-10	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 4 of 7
Logger(s): KT	Start Time: 1545	Finish Time: 1640	Core Recovery (ft): 10/10

	Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
8	30	9.0	N	0%	Natural	0%	SC	
1		521	↓		Stained	100%	GW	clayey gravel - NAPL
0	31	386.0			Natural	0%	SC	
1		533	Y?		Stained	100%		thin 0.2' seam Black stained - granular - along lamination - planar - darkest of all staining - (Reagent? Reacted NAPL?) - No reaction to spray
0	32	1.2	NT	?	Natural	0%		
	33	0						
	34							
	35	0						
	36	0						
1	37				Stained	100%	GW	Stained NAPL gravel lense @ 37.5' only 0.1' thick of staining
0	38	0			Natural	0%	SC	
	39	0						
	40							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TECH

Boring ID: PTC-10	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 5 of 7
Logger(s): KT	Start Time: 1545	Finish Time: 1640	Core Recovery (ft): 10.3'/10'

	Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
0	40	0	N	0%		0%	SC/SM	Creamy white clayey silty sand with phosphatic lithics
		0						discolored gravel lenses at 44, 46, 47.5, 48
	41							
		0						Some of the NAPL looks black & granular
	42	4.6			~~Hue change darker~~ a little darker	100%		(Reagent Reacted NAPL?)
	43							
		5.1						
1	44	71.5			NAPL Stained	100%	GW	
0		46			Natural	0%	SC	
	45							
1		50						
0	46	147.1			Stained Natural	100%	GW SC	
		42						
	47	22					SC	
1		85			Stained	100%	GW	
0					Natural	0%	SC	
1	48	108			Stained	100%	GW	
							SM	Stained with NAPL decreases with depth from 48 to 54
	49	112						
	50							

SOIL ORE LOG FORM

PROCESS AREA DNAPL INVESTIGATIO PPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-220133

TETRA TEC

Boring ID: PTC-10	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 6 of 7
Logger(s): KT	Start Time: 1545	Finish Time: 1640	Core Recovery (ft): 9.8/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
50		N	0	Stained NAPL	80%	SM	Silty sand with NAPL staining. Staining decreases with depth.
	80						
51							
					50%		
52	40						
53	64				30%		
54				Natural	0%	SC	
55	20						
56							
	11						
57	36			Stained	50%		
58	95					SC/SM	
59							
60							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201330

TETRA TECH

Boring ID: PTC-10	Date: 6/25/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 7 of 7
Logger(s): KT	Start Time: 1545	Finish Time: 1640	Core Recovery (ft): 6.5/7

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
60		N	0	Natural & Stained	50%	SC/SM	Napl Stained Soils
	33	↓	↓	↓	↓	↓	No indication of reagent present based on color
61							Some of the NAPL looks black &
							granular/crystalline - Reagent Reacting with NAPL
62							
63							
64							
	58	↓	↓	↓	↓	↓	
65							
							TD=65' bgs
66							
67							
68							
69							
70							

SOIL [hole punch]RE LOG FORM PROCESS AREA DNAPL INVESTIGATIO[hole punch]PPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-220133[hole punch]

TETRA TEC[hole punch]

Boring ID: PTC-11	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"		Core Log Sheet 1 of 7
Logger(s): KT	Start Time: 0730	Finish Time:		Core Recovery (ft): 3'/8'

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
0							0-5 No Recovery
1							
2							
3							
4							
5		N	0%	Black	100%		
6						SP	
7				Natural	0%		
8							
9							
10						CL/SM	9.5-16 CL/SM, dense, medium stiff

1
0

SOIL ORE LOG FORM

PROCESS AREA DNAPL INVESTIGATIO PPER HAWTHORN GROUP
Beazer-Koppers, FL   Project: 117-220133

TETRA TEC

Boring ID: FTC-11	Date: 6/26/14	Casing / Core Dia. (in): 4.75" / 4"	Core Log Sheet 2 of 7
Logger(s): KT	Start Time: 0730	Finish Time: 830	Core Recovery (ft):

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
10		N	0%	Natural	0%	CL/SC	mixed sandy clays & clay. mostly SC
11							
12							
13							
14							
15							
16						SP	Loose saturated sand
17							
18		Y?	40%?	Marbled	40%		18-20 Loose Sand with Blobs of discoloration; brown & grey
19							
20							

SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201336

TETRA TECH

Boring ID: PTC-11	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 3 of 7
Logger(s): KT	Start Time: 0730	Finish Time: 830	Core Recovery (ft): 10/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
20		Y?	50%?	Marbled browns	50%?	SM	20-26 - Marbled color plastic-like consistency ~~Not much sheen~~ little to no sheen visible
21							
22							
23							
24				Marbled with more reddish tint			
25							
26			30%	Multicolored Along Laminations	30%	CL/SM	interbedded clays & sands - dark rusty red streak @ 26.8' Color changes along laminations
27							
28							
29							
30		N	0%	NAPL stained	100%	GW	clayey gravels with NAPL

SOIL [illegible]RE LOG FORM

PROCESS AREA DNAPL INVESTIGATIO[illegible]PPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-22013[illegible]

TETRA TEC[illegible]

Boring ID: PTC-11	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 4 of 7
Logger(s): KT	Start Time: 0730	Finish Time: 830	Core Recovery (ft): 10.2/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
30		N?	?	Stained Dark Brown	50%	GW/SC	Gravelly clays & Sandy clays/clayey Sands Stained w/?? NAPL. NAPL looks black speckled - Mineralized? Reacted Reagent?
31							
32		N	0	Natural	0%	SC	Greenywhite clayey Sands with angular black coarse sands/lithics No discoloration
33							
34							
35							
36							
37							
38							
39							
40							

SOIL CORE LOG FORM PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-22013[illegible]

TETRA TECH

Boring ID: PTC-11	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 5 of 7
Logger(s): KT	Start Time: 0730	Finish Time: 830	Core Recovery (ft): 10.3/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
40		N	~~100%~~	Natural	0%	SC	
		~~N~~	10%	↓	↓	↓	@ 41' – Creamy white changes to an obvious Rusty Red color
41		Yes	100%	Rust Red	100%		
42		↓	↓	↓	↓	↓	Surrounds Black NAPL @ 44', 45'
43							And in blobs throughout. The Rusty Red Matrix reacts with the Neutralization fluid
44			80%			GW	
45			100%			SC	Reagent doesn't follow planar pattern No bedding planes apparent, seems to travel through Matrix
46							
47							
48		Y	20%	Mostly dull dark brown NAPL with Spots of Rust Red	80%	SC	
49		↓	↓		↓	↓	
50							

SOIL CORE LOG FORM

PROCESS AREA DNAPL INVESTIGATION UPPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-2201330

TETRA TECH

Boring ID: PTC-11	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 6 of 7
Logger(s): KT	Start Time: 0730 / Finish Time: 0830		Core Recovery (ft): 10.4/10

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
50		Y	20%	Mostly NAPL Stained w/ occassional Rust Red	80%	SC	48-52.5 Mostly NAPL Stained with occassional rust red coloring - Mostly unreacted
51							
52							
53			100%	Rust Red	100%		52.5-54.5 - Matrix Stained Rust Red
54			20%				
			100%				
55			10%	Mostly Natural with Blobs of NAPL & Rust Red	20%		54.5'-58' Mostly Natural with Some NAPL staining less reagent Blob of reacted NAPL? @ 56'
56							
57							
58		Y	10%	Mixed NAPL/Natural/Reagent	50%		58-65 NAPL Stained Soils with Some Rust Red Blobs of Reagent
59							
60							

SOIL ●RE LOG FORM

PROCESS AREA DNAPL INVESTIGATIO● ●PPER HAWTHORN GROUP
Beazer-Koppers, FL Project: 117-220133●

TETRA TEC●

Boring ID: PTC-11	Date: 6/26/14	Casing / Core Dia. (in): 4.75"/4"	Core Log Sheet 7 of 7
Logger(s): KT	Start Time: 0730	Finish Time:	Core Recovery (ft): 6/7

Core Interval (feet BGS)	PID screen (ppm) internal core	ISGS Reagent Present (Y/N)	NAPL Treated (%)	Color, Hue, Chroma (wet)	Percent Discoloration	USCS Classification	Notes:
60		Y	10-20%	NAPL/Natural/ Rust Red	50%	SM	Mostly NAPL from 58-59
61		↓	↓	↓	↓	↓	Rust Red Coloring throughout in Blobs & in lines along Edge of core (Artifact of drilling)
62							Reacts with Neutralization Solution
63							
64							
65							TD=65
66							
67							
68							
69							
70							

APPENDIX F

FULL-SCALE ISGS INJECTION INTERVALS AND VOLUMES

Full-Scale ISGS Injection Invervals and Volumes

Injection Point	Hydrogeologic Unit	Reagent Volume (gal)	Total Reagent Volume (gal)
IP001	Surficial	527	527
	Upper Hawthorn	N/A	
IP002	Surficial	N/A	139
	Upper Hawthorn	139	
IP003	Surficial	194	194
	Upper Hawthorn	N/A	
IP004	Surficial	222	222
	Upper Hawthorn	N/A	
IP005	Surficial	222	222
	Upper Hawthorn	N/A	
IP006	Surficial	221	415
	Upper Hawthorn	194	
IP007	Surficial	N/A	222
	Upper Hawthorn	222	
IP008	Surficial	749	805
	Upper Hawthorn	56	
IP009	Surficial	194	444
	Upper Hawthorn	250	
IP010	Surficial	278	527
	Upper Hawthorn	250	
IP011	Surficial	N/A	472
	Upper Hawthorn	472	
IP012	Surficial	416	416
	Upper Hawthorn	N/A	
IP013	Surficial	N/A	472
	Upper Hawthorn	472	
IP014	Surficial	333	1,013
	Upper Hawthorn	680	
IP015	Surficial	361	361
	Upper Hawthorn	N/A	
IP016	Surficial	389	694
	Upper Hawthorn	305	
IP017	Surficial	N/A	527
	Upper Hawthorn	527	
IP018	Surficial	389	389
	Upper Hawthorn	N/A	
IP019	Surficial	250	500
	Upper Hawthorn	250	
IP020	Surficial	N/A	389
	Upper Hawthorn	389	
IP021	Surficial	N/A	139
	Upper Hawthorn	139	
IP022	Surficial	139	139
	Upper Hawthorn	N/A	

Full-Scale ISGS Injection Invervals and Volumes (cont'd)

Injection Point	Hydrogeologic Unit	Reagent Volume (gal)	Total Reagent Volume (gal)
IP023	Surficial	189	550
	Upper Hawthorn	361	
IP024	Surficial	888	999
	Upper Hawthorn	111	
IP025	Surficial	222	638
	Upper Hawthorn	416	
IP026	Surficial	N/A	638
	Upper Hawthorn	638	
IP027	Surficial	111	111
	Upper Hawthorn	N/A	
IP028	Surficial	412	606
	Upper Hawthorn	194	
IP029	Surficial	280	694
	Upper Hawthorn	414	
IP030	Surficial	222	611
	Upper Hawthorn	389	
IP031	Surficial	278	416
	Upper Hawthorn	139	
IP032	Surficial	500	749
	Upper Hawthorn	250	
IP033	Surficial	343	982
	Upper Hawthorn	638	
IP034	Surficial	283	922
	Upper Hawthorn	638	
IP035	Surficial	250	860
	Upper Hawthorn	611	
IP036	Surficial	N/A	520
	Upper Hawthorn	520	
IP037	Surficial	189	328
	Upper Hawthorn	139	
IP038	Surficial	527	1,139
	Upper Hawthorn	611	
IP039	Surficial	235	833
	Upper Hawthorn	598	
IP040	Surficial	305	916
	Upper Hawthorn	611	
IP041	Surficial	222	777
	Upper Hawthorn	555	
IP042	Surficial	167	861
	Upper Hawthorn	694	
IP043	Surficial	N/A	333
	Upper Hawthorn	333	
IP044	Surficial	N/A	389
	Upper Hawthorn	389	

Full-Scale ISGS Injection Invervals and Volumes (cont'd)

Injection Point	Hydrogeologic Unit	Reagent Volume (gal)	Total Reagent Volume (gal)
IP045	Surficial	194	444
	Upper Hawthorn	250	
IP046	Surficial	489	1,166
	Upper Hawthorn	677	
IP047	Surficial	694	1,027
	Upper Hawthorn	333	
IP048	Surficial	389	666
	Upper Hawthorn	278	
IP049	Surficial	305	1,332
	Upper Hawthorn	1,027	
IP050	Surficial	703	1,896
	Upper Hawthorn	1,194	
IP051	Surficial	111	833
	Upper Hawthorn	722	
IP052	Surficial	N/A	139
	Upper Hawthorn	139	
IP053	Surficial	250	250
	Upper Hawthorn	N/A	
IP054	Surficial	305	472
	Upper Hawthorn	167	
IP055	Surficial	N/A	500
	Upper Hawthorn	500	
IP056	Surficial	N/A	500
	Upper Hawthorn	500	
IP057	Surficial	472	1,138
	Upper Hawthorn	666	
IP058	Surficial	472	1,249
	Upper Hawthorn	777	
IP059	Surficial	N/A	111
	Upper Hawthorn	111	
IP060	Surficial	N/A	167
	Upper Hawthorn	167	
IP061	Surficial	228	1,027
	Upper Hawthorn	799	
IP062	Surficial	444	916
	Upper Hawthorn	472	
IP063	Surficial	N/A	972
	Upper Hawthorn	972	
IP064	Surficial	139	666
	Upper Hawthorn	527	
IP065	Surficial	611	1,471
	Upper Hawthorn	861	
IP066	Surficial	240	1,166
	Upper Hawthorn	926	

Full-Scale ISGS Injection Invervals and Volumes (cont'd)

Injection Point	Hydrogeologic Unit	Reagent Volume (gal)	Total Reagent Volume (gal)
IP067	Surficial	N/A	527
	Upper Hawthorn	527	
IP068	Surficial	N/A	139
	Upper Hawthorn	139	
IP069	Surficial	N/A	139
	Upper Hawthorn	139	
IP070	Surficial	167	444
	Upper Hawthorn	278	
IP071	Surficial	111	1,249
	Upper Hawthorn	1,138	
IP072	Surficial	N/A	611
	Upper Hawthorn	611	
IP073	Surficial	N/A	444
	Upper Hawthorn	444	
IP074	Surficial	194	1,110
	Upper Hawthorn	916	
IP075	Surficial	N/A	333
	Upper Hawthorn	333	
IP076	Surficial	N/A	638
	Upper Hawthorn	638	
IP077	Surficial	N/A	472
	Upper Hawthorn	472	
IP078	Surficial	N/A	416
	Upper Hawthorn	416	
IP079	Surficial	194	888
	Upper Hawthorn	694	
IP080	Surficial	172	866
	Upper Hawthorn	694	
IP081	Surficial	N/A	638
	Upper Hawthorn	638	
IP082	Surficial	250	833
	Upper Hawthorn	583	
IP083	Surficial	244	1,166
	Upper Hawthorn	922	
IP084	Surficial	N/A	555
	Upper Hawthorn	555	
IP085	Surficial	N/A	167
	Upper Hawthorn	167	
IP086	Surficial	N/A	389
	Upper Hawthorn	389	
IP087	Surficial	N/A	389
	Upper Hawthorn	389	
IP088	Surficial	N/A	555
	Upper Hawthorn	555	

Full-Scale ISGS Injection Invervals and Volumes (cont'd)

Injection Point	Hydrogeologic Unit	Reagent Volume (gal)	Total Reagent Volume (gal)
IP089	Surficial	N/A	583
	Upper Hawthorn	583	
IP090	Surficial	167	583
	Upper Hawthorn	416	
IP091	Surficial	111	999
	Upper Hawthorn	888	
IP092	Surficial	N/A	527
	Upper Hawthorn	527	
IP093	Surficial	N/A	389
	Upper Hawthorn	389	
IP094	Surficial	N/A	527
	Upper Hawthorn	527	
IP095	Surficial	363	1,443
	Upper Hawthorn	1,080	
IP096	Surficial	172	589
	Upper Hawthorn	416	
IP097	Surficial	305	860
	Upper Hawthorn	555	
IP098	Surficial	171	972
	Upper Hawthorn	801	
IP099	Surficial	167	777
	Upper Hawthorn	611	
IP100	Surficial	250	972
	Upper Hawthorn	722	
IP101	Surficial	N/A	1,055
	Upper Hawthorn	1,055	
IP102	Surficial	N/A	333
	Upper Hawthorn	333	
IP103	Surficial	136	552
	Upper Hawthorn	416	
IP104	Surficial	111	833
	Upper Hawthorn	722	
IP105	Surficial	N/A	444
	Upper Hawthorn	444	
IP106	Surficial	N/A	527
	Upper Hawthorn	527	
IP107	Surficial	194	805
	Upper Hawthorn	611	
IP108	Surficial	194	638
	Upper Hawthorn	444	
IP109	Surficial	N/A	750
	Upper Hawthorn	750	
IP110	Surficial	N/A	1,083
	Upper Hawthorn	1,083	

Full-Scale ISGS Injection Invervals and Volumes (cont'd)

Injection Point	Hydrogeologic Unit	Reagent Volume (gal)	Total Reagent Volume (gal)
IP111	Surficial	N/A	305
	Upper Hawthorn	305	
IP112	Surficial	462	1,638
	Upper Hawthorn	1,176	
IP113	Surficial	111	555
	Upper Hawthorn	444	
IP114	Surficial	278	749
	Upper Hawthorn	472	
IP115	Surficial	N/A	861
	Upper Hawthorn	861	
IP116	Surficial	194	611
	Upper Hawthorn	416	
IP117	Surficial	139	999
	Upper Hawthorn	861	
IP118	Surficial	N/A	999
	Upper Hawthorn	999	
IP119	Surficial	N/A	472
	Upper Hawthorn	472	
IP120	Surficial	111	444
	Upper Hawthorn	333	
IP121	Surficial	167	611
	Upper Hawthorn	444	
IP122	Surficial	230	701
	Upper Hawthorn	472	
IP123	Surficial	N/A	555
	Upper Hawthorn	555	
IP124	Surficial	N/A	416
	Upper Hawthorn	416	
IP125	Surficial	N/A	638
	Upper Hawthorn	638	
IP126	Surficial	N/A	749
	Upper Hawthorn	749	
IP127	Surficial	N/A	805
	Upper Hawthorn	805	
IP128	Surficial	N/A	416
	Upper Hawthorn	416	
IP129	Surficial	N/A	305
	Upper Hawthorn	305	
IP130	Surficial	472	750
	Upper Hawthorn	278	
IP131	Surficial	247	805
	Upper Hawthorn	559	
IP132	Surficial	443	1,359
	Upper Hawthorn	916	

Full-Scale ISGS Injection Invervals and Volumes (cont'd)

Injection Point	Hydrogeologic Unit	Reagent Volume (gal)	Total Reagent Volume (gal)
IP133	Surficial	N/A	583
	Upper Hawthorn	583	
IP134	Surficial	N/A	750
	Upper Hawthorn	750	
IP135	Surficial	139	972
	Upper Hawthorn	833	
IP136	Surficial	500	1,055
	Upper Hawthorn	555	
IP137	Surficial	N/A	583
	Upper Hawthorn	583	
IP138	Surficial	N/A	111
	Upper Hawthorn	111	
IP139	Surficial	305	305
	Upper Hawthorn	N/A	
IP140	Surficial	162	440
	Upper Hawthorn	278	
IP141	Surficial	N/A	1,110
	Upper Hawthorn	1,110	
IP142	Surficial	N/A	305
	Upper Hawthorn	305	
IP143	Surficial	N/A	472
	Upper Hawthorn	472	
IP144	Surficial	167	805
	Upper Hawthorn	638	
IP145	Surficial	N/A	250
	Upper Hawthorn	250	
IP146	Surficial	N/A	139
	Upper Hawthorn	139	
IP147	Surficial	111	250
	Upper Hawthorn	139	
IP148	Surficial	472	805
	Upper Hawthorn	333	
IP149	Surficial	922	922
	Upper Hawthorn	N/A	
IP150	Surficial	416	1,582
	Upper Hawthorn	1,166	
IP151	Surficial	N/A	555
	Upper Hawthorn	555	
IP152	Surficial	N/A	777
	Upper Hawthorn	777	
IP153	Surficial	500	916
	Upper Hawthorn	416	
IP154	Surficial	N/A	777
	Upper Hawthorn	777	

Full-Scale ISGS Injection Invervals and Volumes (cont'd)

Injection Point	Hydrogeologic Unit	Reagent Volume (gal)	Total Reagent Volume (gal)
IP155	Surficial	888	888
	Upper Hawthorn	N/A	
IP156	Surficial	861	1,221
	Upper Hawthorn	361	
IP157	Surficial	N/A	888
	Upper Hawthorn	888	
IP158	Surficial	167	638
	Upper Hawthorn	472	
IP159	Surficial	N/A	638
	Upper Hawthorn	638	
IP160	Surficial	N/A	333
	Upper Hawthorn	333	
IP161	Surficial	N/A	583
	Upper Hawthorn	583	
IP162	Surficial	N/A	139
	Upper Hawthorn	139	
IP163	Surficial	101	167
	Upper Hawthorn	66	
IP164	Surficial	500	500
	Upper Hawthorn	N/A	
IP165	Surficial	916	916
	Upper Hawthorn	N/A	
IP166	Surficial	666	2,276
	Upper Hawthorn	1,610	
IP167	Surficial	111	944
	Upper Hawthorn	833	
IP168	Surficial	N/A	1,194
	Upper Hawthorn	1,194	
IP169	Surficial	N/A	583
	Upper Hawthorn	583	
IP170	Surficial	107	107
	Upper Hawthorn	N/A	
IP171	Surficial	278	278
	Upper Hawthorn	N/A	
IP172	Surficial	458	1,097
	Upper Hawthorn	638	
IP173	Surficial	278	1,443
	Upper Hawthorn	1,166	
IP174	Surficial	N/A	777
	Upper Hawthorn	777	
IP175	Surficial	N/A	500
	Upper Hawthorn	500	
IP176	Surficial	N/A	899
	Upper Hawthorn	899	

Full-Scale ISGS Injection Invervals and Volumes (cont'd)

Injection Point	Hydrogeologic Unit	Reagent Volume (gal)	Total Reagent Volume (gal)
IP177	Surficial	N/A	151
	Upper Hawthorn	151	
IP178	Surficial	472	472
	Upper Hawthorn	N/A	
IP179	Surficial	222	555
	Upper Hawthorn	333	
IP180	Surficial	838	2,526
	Upper Hawthorn	1,688	
IP181	Surficial	722	1,221
	Upper Hawthorn	500	
IP182	Surficial	444	1,331
	Upper Hawthorn	887	
IP183	Surficial	181	1,444
	Upper Hawthorn	1,262	
IP184	Surficial	222	222
	Upper Hawthorn	N/A	
IP185	Surficial	250	389
	Upper Hawthorn	139	
IP186	Surficial	257	451
	Upper Hawthorn	194	
IP187	Surficial	832	1,693
	Upper Hawthorn	861	
IP188	Surficial	N/A	1,277
	Upper Hawthorn	1,277	
IP189	Surficial	278	1,094
	Upper Hawthorn	817	
IP190	Surficial	N/A	139
	Upper Hawthorn	139	
IP191	Surficial	N/A	250
	Upper Hawthorn	250	
IP192	Surficial	N/A	194
	Upper Hawthorn	194	
IP193	Surficial	999	1,217
	Upper Hawthorn	218	
IP194	Surficial	194	527
	Upper Hawthorn	333	
IP195	Surficial	938	1,749
	Upper Hawthorn	811	
IP196	Surficial	842	2,276
	Upper Hawthorn	1,435	
IP197	Surficial	528	1,360
	Upper Hawthorn	832	
IP198	Surficial	244	916
	Upper Hawthorn	672	

Full-Scale ISGS Injection Invervals and Volumes (cont'd)

Injection Point	Hydrogeologic Unit	Reagent Volume (gal)	Total Reagent Volume (gal)
IP199	Surficial	972	1,249
	Upper Hawthorn	278	
IP200	Surficial	111	111
	Upper Hawthorn	N/A	
IP201	Surficial	302	302
	Upper Hawthorn	N/A	
IP202	Surficial	844	944
	Upper Hawthorn	99	
IP203	Surficial	583	583
	Upper Hawthorn	N/A	
IP204	Surficial	182	611
	Upper Hawthorn	429	
IP205	Surficial	N/A	111
	Upper Hawthorn	111	
IP206	Surficial	70	250
	Upper Hawthorn	180	
IP207	Surficial	916	1,221
	Upper Hawthorn	305	
IP208	Surficial	167	278
	Upper Hawthorn	111	
IP209	Surficial	1,027	1,416
	Upper Hawthorn	389	
IP210	Surficial	888	1,138
	Upper Hawthorn	250	
IP211	Surficial	N/A	666
	Upper Hawthorn	666	
IP212	Surficial	250	307
	Upper Hawthorn	57	
IP213	Surficial	305	305
	Upper Hawthorn	N/A	
IP214	Surficial	512	583
	Upper Hawthorn	71	
IP215	Surficial	694	972
	Upper Hawthorn	278	
IP216	Surficial	146	389
	Upper Hawthorn	243	
IP217	Surficial	122	261
	Upper Hawthorn	139	
IP218	Surficial	N/A	694
	Upper Hawthorn	694	
IP219	Surficial	139	139
	Upper Hawthorn	N/A	
IP220	Surficial	146	146
	Upper Hawthorn	N/A	

Full-Scale ISGS Injection Invervals and Volumes (cont'd)

Injection Point	Hydrogeologic Unit	Reagent Volume (gal)	Total Reagent Volume (gal)
IP221	Surficial	638	1,055
	Upper Hawthorn	416	
IP222	Surficial	888	1,582
	Upper Hawthorn	694	
IP223	Surficial	N/A	333
	Upper Hawthorn	333	
IP224	Surficial	213	213
	Upper Hawthorn	N/A	
IP225	Surficial	111	111
	Upper Hawthorn	N/A	
IP226	Surficial	N/A	139
	Upper Hawthorn	139	
IP227	Surficial	302	302
	Upper Hawthorn	N/A	
IP228	Surficial	139	305
	Upper Hawthorn	167	
IP229	Surficial	191	639
	Upper Hawthorn	448	
IP230	Surficial	N/A	305
	Upper Hawthorn	305	
IP231	Surficial	N/A	194
	Upper Hawthorn	194	
IP232	Surficial	N/A	194
	Upper Hawthorn	194	
IP233	Surficial	N/A	361
	Upper Hawthorn	361	
IP234	Surficial	N/A	111
	Upper Hawthorn	111	
IP235	Surficial	N/A	111
	Upper Hawthorn	111	
IP236	Surficial	N/A	250
	Upper Hawthorn	250	
IP237	Surficial	278	278
	Upper Hawthorn	N/A	
IP238	Surficial	N/A	222
	Upper Hawthorn	222	
IP239	Surficial	N/A	777
	Upper Hawthorn	777	
IP240	Surficial	N/A	278
	Upper Hawthorn	278	
IP241	Surficial	111	111
	Upper Hawthorn	N/A	
IP242	Surficial	N/A	111
	Upper Hawthorn	111	

Full-Scale ISGS Injection Invervals and Volumes (cont'd)

Injection Point	Hydrogeologic Unit	Reagent Volume (gal)	Total Reagent Volume (gal)
IP243	Surficial	N/A	416
	Upper Hawthorn	416	
IP244	Surficial	N/A	416
	Upper Hawthorn	416	
IP245	Surficial	N/A	999
	Upper Hawthorn	999	
IP246	Surficial	N/A	777
	Upper Hawthorn	777	
IP247	Surficial	N/A	444
	Upper Hawthorn	444	
IP248	Surficial	N/A	305
	Upper Hawthorn	305	
IP249	Surficial	N/A	167
	Upper Hawthorn	167	
IP250	Surficial	N/A	250
	Upper Hawthorn	250	
IP251	Surficial	N/A	333
	Upper Hawthorn	333	
IP252	Surficial	N/A	777
	Upper Hawthorn	777	
IP253	Surficial	N/A	389
	Upper Hawthorn	389	
380N/180E	Surficial	N/A	555
	Upper Hawthorn	555	
Total	Surficial	51,809	166,571
	Upper Hawthorn	114,762	

N/A = Not Applicable

APPENDIX G

LABORATORY ANALYTICAL REPORT

April 09, 2014

Service Request No: J1402025

Ms. Angela Gatchie
Field and Technical Services, LLC
200 Third Avenue
Carnegie, PA 15106

Laboratory Results for: Gainesville March 2014 UIC GW Monitoring/OM-0450-14

Dear Ms. Gatchie:

Enclosed are the results of the sample(s) submitted to our laboratory on March 19, 2014. For your reference, these analyses have been assigned our service request number **J1402025**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 4409. You may also contact me via email at Craig.Myers@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Craig Myers
Project Manager

Page 1 of 523

TABLE OF CONTENTS

ALS Lab Reference No.: J1402025
Non CLP Tier IV (w/ Raw Data)

This report contains a total of 523 pages

ALS ENVIRONMENTAL, INC.

Client:	Beazer East, Inc.	**Service Request No.:**	J1402025
Project:	Gainesville March 2014 UIC GW Monitoring	**Date Received:**	03/19/2014
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV, validation deliverables including all summary forms and associated raw data. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

Sample Receipt

Seven water samples were received for analysis at ALS Environmental on 03/19/2014. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at ≤6°C upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

Metals Analyses:

Method 6010B: The control criterion for the serial dilution analysis of Total Aluminum and Iron for sample J1402025-007 is not applicable. The concentration of the analyte in the parent sample is less than 10x the reporting limit. No further corrective action was required.

Method 6010B: The control criterion for the serial dilution analysis of Dissolved Antimony, Arsenic, Cadmium, Chromium, and Molybdenum for sample J1402025-007 and Dissolved Aluminum for sample J1402025-002 is not applicable. The concentration of the analyte in the parent sample is less than 10x the reporting limit. No further corrective action was required.

General Chemistry Analyses:

No significant data anomalies were noted with this analysis.

Approved by ____ Date 4/9/14

Client: Field and Technical Services, LLC
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14

Service Request: J1402025

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
J1402025-001	GAIN-M-25A-031814	3/18/14	10:53
J1402025-002	GAIN-M-36B-031814	3/18/14	11:49
J1402025-003	GAIN-HG-24S-031814	3/18/14	13:35
J1402025-004	GAIN-M-25B-031814	3/18/14	14:28
J1402025-005	GAIN-HG-33S-031914	3/19/14	08:41
J1402025-006	GAIN-HG-34S-031914	3/19/14	09:28
J1402025-007	GAIN-HG-22D-031914	3/19/14	11:15

Data Qualifiers

Inorganic Data

- * The result is an outlier. See case narrative.
- # The control limit criteria are not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimated amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- Z Too many colonies were present (TNTC). The numeric value represents the filtration volume.
- i The MRL/MDL has been elevated due to matrix interference.
- X See case narrative.

Metals Data

- * The result is an outlier. See case narrative.
- # The control limit criteria are not applicable. See case narrative.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The reported value is estimated because of the presence of matrix interference.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The result was determined by Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

Organic Data

- * The result is an outlier. See case narrative.
- # The control limit criteria are not applicable. See case narrative.
- A The tentatively identified compound is a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria were exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides)
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

Petroleum Hydrocarbon Specific

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Chain of Custody Documentation

9143 Philips Highway, Suite 200
Jacksonville, Florida 32256
Phone: (904) 739-2277 Fax (904) 739-2011
www.alsglobal.com

FTS Field & Technical Services, LLC

CHAIN OF CUSTODY RECORD/LABORA[redacted] REQUEST FORM

1402025
REF.# 100377

Project Name:	Gainesville March 2014 UIC GW Monitoring	Company:	Field & Technical Services	Client:	Beazer East, Inc.
Project Number:	OM-0450-14	Address:	200 Third Avenue	Contact:	(412) 706-2278
Laboratory:	Columbia		Carnegie, PA 15106		sclark.2006@f-ts.com
Shipment Method	FEDEX		(412) 279-3363		
Program:	March 2014 UIC GW Monitoring_001				

Sample Date	Sample Time	Matrix	Sample Identification	Analysis	pH_TDS_Color_Chloride	METALS_AQ_DISS	METALS_AQ_TOTAL		Notes:
				Preservative	None	HNO3	HNO3		
				Total Bottle Count					
03/18/2014	1053	AQ	GAIN-M-25A-031814	3	1	1	1		
03/18/2014	1149	AQ	GAIN-M-36B-031814	3	1	1	1		
03/18/2014	1335	AQ	GAIN-HG-24S-031814	3	1	1	1		
03/18/2014	1428	AQ	GAIN-M-25B-031814	3	1	1	1		
03/19/2014	0841	AQ	GAIN-HG-33S-031914	3	1	1	1		
03/19/2014	0928	AQ	GAIN-HG-34S-031914	3	1	1	1		
03/19/2014	1115	AQ	GAIN-HG-22D-031914	3	1	1	1		

Relinquished by:	Relinquished by:	Relinquished by:	Turnaround Requirements	
Signature: Steven R. Clark	Signature: R. Nicholas	Signature: Robert Nichols	Rush: [ ]	GBauer
Printed Name: Steven Clark	Printed Name: R. Nicholas	Printed Name: R. Nicholas	Standard: [X]	GBauer
Firm: FTS	Firm: ALS	Firm: ALS		ALS
Date/Time: 03/19/2014 1254	Date/Time: 3/19/14 2:31	Date/Time: 3/19/14 4:24		3.19.14 1624

2.7°C

ALS Environmental

Cooler Receipt Form

Client: Beazer Service Request #: J1402025

Project: OM-0450-14

Cooler received on 3.19.14 and opened on 3.19.14 by GB

COURIER: ALS UPS FEDEX Client Other ______ Airbill # ______

1	Were custody seals on outside of cooler?	Yes No
	If yes, how many and where?	#: 1 on lid other
2	Were seals intact and signature and date correct?	Yes No N/A
3	Were custody papers properly filled out?	Yes No N/A
4	Temperature of cooler(s) upon receipt (Should be > 0°C and < 6°C)	2.7
5	Thermometer ID	J71
6	Temperature Blank Present?	Yes No
7	Were Ice or Ice Packs present	Ice Ice Packs No
8	Did all bottles arrive in good condition (unbroken, etc....)?	Yes No N/A
9	Type of packing material present	Netting Vial Holder Bubble Wrap Paper Styrofoam Other N/A
10	Were all bottle labels complete (sample ID, preservation, etc....)?	Yes No N/A
11	Did all bottle labels and tags agree with custody papers?	Yes No N/A
12	Were the correct bottles used for the tests indicated?	Yes No N/A
13	Were all of the preserved bottles received with the appropriate preservative? HNO3 pH<2 H2SO4 pH<2 ZnAc2/NaOH pH>9 NaOH pH>12 HCl pH<2 Preservative additions noted below	Yes No N/A
14	Were all samples received within analysis holding times?	Yes No N/A
15	Were all VOA vials free of air bubbles? If present, note below	Yes No N/A
16	Where did the bottles originate?	ALS Client

Sample ID	Reagent	Lot #	ml added	Initials Date/Time

Additional comments and/or explanation of all discrepancies noted above:

Client approval to run samples if discrepancies noted: Date:

Jacksonville Laboratory
Condition Upon Receipt - Sample pH

ALS Environmental

SR #: J 1402025 Date: 3.19.14 Initials: GB

Note that pH is check and meets the required pH criterion listed in the column heading unless otherwise noted on the cooler receipt form.

	40mL	40mL	40mL	125ml	125ml	125ml	125ml	250ml	250ml	250ml	250ml	250ml	250ml	250ml	500ml	500ml	500ml	500ml	500ml	1L	1L	1L	1L	1L	2oz	4oz	8oz	16oz	100ml	Ziplock	Misc.	
Container	G	G	G	P	P	P	P	P	P	P	P	P	G	G	P	P	P	P	G	P	P	G	G	G	G	G	G	G	P	P	Misc.	
Preserve	N/A	HCl	Na2 S2O3	N/A	HCl	H2SO4	HNO3	N/A	H2SO4	HNO3	ZnAc2/ NaOH	NaOH	N/A	HNO3	N/A	HCl	H2SO4	HNO3	N/A	N/A	HNO3	N/A	HCl	H2SO4	N/A	N/A	N/A	N/A	Na2 S2O3	N/A	N/A	
Req. pH	N/A	<2	N/A	N/A	<2	<2	<2	N/A	<2	<2	>9	>12	N/A	<2	N/A	<2	<2	<2	N/A	N/A	<2	N/A	<2	<2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Sample #	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-1																		2		1												-1
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-38																																-38
-39																																-39
-40																																-40

Note: VOA pH checks are performed by the analytical area, not sample control.

Summary Package

9143 Philips Highway, Suite 200
Jacksonville, Florida 32256
Phone: (904) 739-2277 Fax (904) 739-2011
www.alsglobal.com

Inorganic Analysis:

Metals

Summary Package

Sample and QC Results

Total Metals
- COVER PAGE -
INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc.

SDG No.: J1402025 Method Type: 6010B/6020/74 SOW No.:

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Lab Sample ID	Client Sample ID	QC Description
J1402025-001	GAIN-M-25A-031814	
J1402025-002	GAIN-M-36B-031814	
J1402025-003	GAIN-HG-24S-031814	
J1402025-003S	GAIN-HG-24S-031814S	Matrix Spike
J1402025-003SD	GAIN-HG-24S-031814SD	Matrix Spike Duplicate
J1402025-004	GAIN-M-25B-031814	
J1402025-005	GAIN-HG-33S-031914	
J1402025-006	GAIN-HG-34S-031914	
J1402025-007	GAIN-HG-22D-031914	
J1402025-007S	GAIN-HG-22D-031914S	Matrix Spike
J1402025-007SD	GAIN-HG-22D-031914SD	Matrix Spike Duplicate

Were ICP interelement corrections applied? Yes/No Yes

Were ICP background corrections applied? Yes/No Yes
If yes - were raw data generated before applications of background corrections? Yes/No No

Comments: Perkin Elmer MSF program is used for IEC corrections

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Name: Craig Myers

Date: 4/8/14 Title: Project Manager

Total Metals

- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-001 **Client ID:** GAIN-M-25A-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204592 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	192	ug/L			6010B	11	100	1.00	3/21/2014	20:24:50
Antimony	1.2	ug/L			6020	0.160	1.0	1.00	3/24/2014	18:08
Arsenic	1.2	ug/L			6020	0.42	1.0	1.00	3/24/2014	18:08
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/24/2014	18:08
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/24/2014	18:08
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/24/2014	18:08
Iron	265	ug/L			6010B	2.5	100	1.00	3/21/2014	20:24:50
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/24/2014	18:08
Lithium	10.0	ug/L	U		6010B	10.0	100	1.00	3/21/2014	20:24:50
Manganese	0.5	ug/L	i		6020	0.1	2.0	1.00	3/24/2014	18:08
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	19:33:54
Molybdenum	2.80	ug/L			6020	0.28	2.00	1.00	3/24/2014	18:08
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/24/2014	18:08
Sodium	1610	ug/L			6010B	29	500	1.00	3/21/2014	20:24:50
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/24/2014	18:08

Comments:

Total Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-002 **Client ID:** GAIN-M-36B-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204592 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	96	ug/L	I		6010B	11	100	1.00	3/21/2014	20:29:43
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/24/2014	18:13
Arsenic	0.78	ug/L	i		6020	0.42	1.0	1.00	3/24/2014	18:13
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/24/2014	18:13
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/24/2014	18:13
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/24/2014	18:13
Iron	909	ug/L			6010B	2.5	100	1.00	3/21/2014	20:29:43
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/24/2014	18:13
Lithium	10.0	ug/L	U		6010B	10.0	100	1.00	3/21/2014	20:29:43
Manganese	27	ug/L			6020	0.1	2.0	1.00	3/24/2014	18:13
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	19:35:03
Molybdenum	2.30	ug/L			6020	0.28	2.00	1.00	3/24/2014	18:13
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/24/2014	18:13
Sodium	6740	ug/L			6010B	29	500	1.00	3/21/2014	20:29:43
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/24/2014	18:13

Comments:

Total Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-003 **Client ID:** GAIN-HG-24S-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204592 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	68	ug/L	I		6010B	11	100	1.00	3/21/2014	20:34:36
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/24/2014	18:18
Arsenic	2.7	ug/L			6020	0.42	1.0	1.00	3/24/2014	18:18
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/24/2014	18:18
Cadmium	0.090	ug/L	i		6020	0.090	0.400	1.00	3/24/2014	18:18
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/24/2014	18:18
Iron	830	ug/L			6010B	2.5	100	1.00	3/21/2014	20:34:36
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/24/2014	18:18
Lithium	10.0	ug/L	U		6010B	10.0	100	1.00	3/21/2014	20:34:36
Manganese	26	ug/L			6020	0.1	2.0	1.00	3/24/2014	18:18
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	19:36:12
Molybdenum	5.70	ug/L			6020	0.28	2.00	1.00	3/24/2014	18:18
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/24/2014	18:18
Sodium	5420	ug/L			6010B	29	500	1.00	3/21/2014	20:34:36
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/24/2014	18:18

Comments:

Total Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-004 **Client ID:** GAIN-M-25B-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204592 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	39	ug/L	I		6010B	11	100	1.00	3/21/2014	20:47:29
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/24/2014	18:23
Arsenic	4.0	ug/L			6020	0.42	1.0	1.00	3/24/2014	18:23
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/24/2014	18:23
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/24/2014	18:23
Chromium	0.30	ug/L	i		6020	0.18	1.0	1.00	3/24/2014	18:23
Iron	286	ug/L			6010B	2.5	100	1.00	3/21/2014	20:47:29
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/24/2014	18:23
Lithium	10.0	ug/L	U		6010B	10.0	100	1.00	3/21/2014	20:47:29
Manganese	63	ug/L			6020	0.1	2.0	1.00	3/24/2014	18:23
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	19:47:01
Molybdenum	0.28	ug/L	U		6020	0.28	2.00	1.00	3/24/2014	18:23
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/24/2014	18:23
Sodium	17100	ug/L			6010B	29	500	1.00	3/21/2014	20:47:29
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/24/2014	18:23

Comments:

Total Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-005 **Client ID:** GAIN-HG-33S-031914

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204592 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	304	ug/L			6010B	11	100	1.00	3/21/2014	20:52:22
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/24/2014	18:38
Arsenic	0.78	ug/L	i		6020	0.42	1.0	1.00	3/24/2014	18:38
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/24/2014	18:38
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/24/2014	18:38
Chromium	0.32	ug/L	i		6020	0.18	1.0	1.00	3/24/2014	18:38
Iron	999	ug/L			6010B	2.5	100	1.00	3/21/2014	20:52:22
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/24/2014	18:38
Lithium	10.0	ug/L	U		6010B	10.0	100	1.00	3/21/2014	20:52:22
Manganese	28	ug/L			6020	0.1	2.0	1.00	3/24/2014	18:38
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	19:48:08
Molybdenum	1.80	ug/L	i		6020	0.28	2.00	1.00	3/24/2014	18:38
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/24/2014	18:38
Sodium	6640	ug/L			6010B	29	500	1.00	3/21/2014	20:52:22
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/24/2014	18:38

Comments:

Total Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-006 **Client ID:** GAIN-HG-34S-031914

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204592 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	478	ug/L			6010B	11	100	1.00	3/21/2014	20:57:14
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/24/2014	18:43
Arsenic	0.69	ug/L	i		6020	0.42	1.0	1.00	3/24/2014	18:43
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/24/2014	18:43
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/24/2014	18:43
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/24/2014	18:43
Iron	18	ug/L	I		6010B	2.5	100	1.00	3/21/2014	20:57:14
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/24/2014	18:43
Lithium	10.0	ug/L	U		6010B	10.0	100	1.00	3/21/2014	20:57:14
Manganese	0.6	ug/L	i		6020	0.1	2.0	1.00	3/24/2014	18:43
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	19:49:16
Molybdenum	7.50	ug/L			6020	0.28	2.00	1.00	3/24/2014	18:43
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/24/2014	18:43
Sodium	11000	ug/L			6010B	29	500	1.00	3/21/2014	20:57:14
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/24/2014	18:43

Comments:

Total Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-007 **Client ID:** GAIN-HG-22D-031914

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204592 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	165	ug/L			6010B	11	100	1.00	3/21/2014	21:02:07
Antimony	0.470	ug/L	i		6020	0.160	1.0	1.00	3/24/2014	18:48
Arsenic	0.88	ug/L	i		6020	0.42	1.0	1.00	3/24/2014	18:48
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/24/2014	18:48
Cadmium	15	ug/L			6020	0.090	0.400	1.00	3/24/2014	18:48
Chromium	11	ug/L			6020	0.18	1.0	1.00	3/24/2014	18:48
Iron	927	ug/L			6010B	2.5	100	1.00	3/21/2014	21:02:07
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/24/2014	18:48
Lithium	10.0	ug/L	U		6010B	10.0	100	1.00	3/21/2014	21:02:07
Manganese	16	ug/L			6020	0.1	2.0	1.00	3/24/2014	18:48
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	19:50:24
Molybdenum	2.10	ug/L			6020	0.28	2.00	1.00	3/24/2014	18:48
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/24/2014	18:48
Sodium	2810	ug/L			6010B	29	500	1.00	3/21/2014	21:02:07
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/24/2014	18:48

Comments:

Total Metals
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: High Purity STDs

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
ICV									
	Aluminum	50100.00	50000	100	90.0 - 110.0	6010B	3/21/2014	18:01	032114A1
	Iron	39200.0	40000	98	90.0 - 110.0	6010B	3/21/2014	18:01	032114A1
	Lithium	5130.00	5000	103	90.0 - 110.0	6010B	3/21/2014	18:01	032114A1
	Sodium	20600.00	20000	103	90.0 - 110.0	6010B	3/21/2014	18:01	032114A1
CCV									
	Aluminum	4980.00	5000	100	90.0 - 110.0	6010B	3/21/2014	18:35	032114A1
	Iron	5080.0	5000	102	90.0 - 110.0	6010B	3/21/2014	18:35	032114A1
	Lithium	4970.00	5000	99	90.0 - 110.0	6010B	3/21/2014	18:35	032114A1
	Sodium	25100.00	25000	100	90.0 - 110.0	6010B	3/21/2014	18:35	032114A1
CCV									
	Aluminum	4900.00	5000	98	90.0 - 110.0	6010B	3/21/2014	19:42	032114A1
	Iron	4980.0	5000	100	90.0 - 110.0	6010B	3/21/2014	19:42	032114A1
	Lithium	4980.00	5000	100	90.0 - 110.0	6010B	3/21/2014	19:42	032114A1
	Sodium	25200.00	25000	101	90.0 - 110.0	6010B	3/21/2014	19:42	032114A1
CCV									
	Aluminum	4890.00	5000	98	90.0 - 110.0	6010B	3/21/2014	20:38	032114A1
	Iron	4980.0	5000	100	90.0 - 110.0	6010B	3/21/2014	20:38	032114A1
	Lithium	4980.00	5000	100	90.0 - 110.0	6010B	3/21/2014	20:38	032114A1
	Sodium	25200.00	25000	101	90.0 - 110.0	6010B	3/21/2014	20:38	032114A1
CCV									
	Aluminum	5010.00	5000	100	90.0 - 110.0	6010B	3/21/2014	21:30	032114A1
	Iron	5060.0	5000	101	90.0 - 110.0	6010B	3/21/2014	21:30	032114A1
	Lithium	5020.00	5000	100	90.0 - 110.0	6010B	3/21/2014	21:30	032114A1
	Sodium	25300.00	25000	101	90.0 - 110.0	6010B	3/21/2014	21:30	032114A1
CCV									
	Aluminum	4890.00	5000	98	90.0 - 110.0	6010B	3/21/2014	22:18	032114A1
	Iron	4900.0	5000	98	90.0 - 110.0	6010B	3/21/2014	22:18	032114A1
	Lithium	5040.00	5000	101	90.0 - 110.0	6010B	3/21/2014	22:18	032114A1
	Sodium	25400.00	25000	102	90.0 - 110.0	6010B	3/21/2014	22:18	032114A1

Total Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: High Purity STDs

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
CCV									
	Aluminum	4900.00	5000	98	90.0 - 110.0	6010B	3/21/2014	23:11	032114A1
	Iron	4930.0	5000	99	90.0 - 110.0	6010B	3/21/2014	23:11	032114A1
	Lithium	5050.00	5000	101	90.0 - 110.0	6010B	3/21/2014	23:11	032114A1
	Sodium	25400.00	25000	102	90.0 - 110.0	6010B	3/21/2014	23:11	032114A1
CCV									
	Aluminum	4930.00	5000	99	90.0 - 110.0	6010B	3/21/2014	23:59	032114A1
	Iron	4950.0	5000	99	90.0 - 110.0	6010B	3/21/2014	23:59	032114A1
	Lithium	5050.00	5000	101	90.0 - 110.0	6010B	3/21/2014	23:59	032114A1
	Sodium	25400.00	25000	102	90.0 - 110.0	6010B	3/21/2014	23:59	032114A1
CCV									
	Aluminum	4960.00	5000	99	90.0 - 110.0	6010B	3/22/2014	00:49	032114A1
	Iron	4990.0	5000	100	90.0 - 110.0	6010B	3/22/2014	00:49	032114A1
	Lithium	5080.00	5000	102	90.0 - 110.0	6010B	3/22/2014	00:49	032114A1
	Sodium	25400.00	25000	102	90.0 - 110.0	6010B	3/22/2014	00:49	032114A1
CCV									
	Aluminum	4980.00	5000	100	90.0 - 110.0	6010B	3/22/2014	01:37	032114A1
	Iron	4990.0	5000	100	90.0 - 110.0	6010B	3/22/2014	01:37	032114A1
	Lithium	5110.00	5000	102	90.0 - 110.0	6010B	3/22/2014	01:37	032114A1
	Sodium	25600.00	25000	102	90.0 - 110.0	6010B	3/22/2014	01:37	032114A1
ICV									
	Antimony	50.5	50	101	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Arsenic	48.1	50	96	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Beryllium	19.6	20	98	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Cadmium	25.7	25	103	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Chromium	50.8	50	102	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Lead	50.4	50	101	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Manganese	50.9	50	102	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Molybdenum	51.4	50	103	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Selenium	51.1	50	102	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Thallium	49.2	50	98	90.0 - 110.0	6020	3/24/2014	17:03	032414A

Total Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: High Purity Standards

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
CCV-1									
	Antimony	50.1	50	100	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Arsenic	50.7	50	101	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Beryllium	24.0	25	96	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Cadmium	20.6	20	103	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Chromium	50.1	50	100	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Lead	25.4	25	102	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Manganese	101.0	100	101	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Molybdenum	101.0	100	101	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Selenium	101.0	100	101	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Thallium	10.0	10	100	90.0 - 110.0	6020	3/24/2014	17:28	032414A
CCV-2									
	Antimony	49.5	50	99	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Arsenic	51.5	50	103	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Beryllium	23.6	25	94	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Cadmium	21.0	20	105	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Chromium	50.0	50	100	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Lead	25.6	25	102	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Manganese	102.0	100	102	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Molybdenum	100.0	100	100	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Selenium	102.0	100	102	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Thallium	10.0	10	100	90.0 - 110.0	6020	3/24/2014	18:28	032414A
CCV-3									
	Antimony	50.3	50	101	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Arsenic	51.6	50	103	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Beryllium	25.1	25	100	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Cadmium	21.2	20	106	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Chromium	50.9	50	102	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Lead	25.5	25	102	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Manganese	102.0	100	102	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Molybdenum	101.0	100	101	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Selenium	102.0	100	102	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Thallium	10.1	10	101	90.0 - 110.0	6020	3/24/2014	19:29	032414A

Total Metals
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: High Purity Standards

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
CCV-4									
	Antimony	49.0	50	98	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Arsenic	51.5	50	103	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Beryllium	26.6	25	106	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Cadmium	20.4	20	102	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Chromium	50.8	50	102	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Lead	25.6	25	102	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Manganese	102.0	100	102	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Molybdenum	101.0	100	101	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Selenium	101.0	100	101	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Thallium	10.1	10	101	90.0 - 110.0	6020	3/24/2014	20:29	032414A
ICV									
	Mercury	4.97	5	99	90.0 - 110.0	7470A	3/24/2014	19:22	032414C
CCV-1									
	Mercury	5.02	5	100	80.0 - 120.0	7470A	3/24/2014	19:39	032414C
CCV-2									
	Mercury	5.03	5	101	80.0 - 120.0	7470A	3/24/2014	19:54	032414C
CCV-3									
	Mercury	5.01	5	100	80.0 - 120.0	7470A	3/24/2014	20:04	032414C

Total Metals
- 2b -
CRDL STANDARD FOR AA & ICP

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No:** **SAS No.:**

AA CRDL Standard Source:

ICP CRDL Standard Source: High Purity STDs

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Advisory Limits (%R)	Method	Analysis Date	Analysis Time	Run Number
MRL									
	Aluminum	68.60	100	69	50 - 150	6010B	3/21/2014	18:15	032114A1
	Iron	106.0	100	106	50 - 150	6010B	3/21/2014	18:15	032114A1
	Lithium	98.8	20	99	50 - 150	6010B	3/21/2014	18:15	032114A1
	Sodium	546.00	500	109	50 - 150	6010B	3/21/2014	18:15	032114A1
MRL									
	Antimony	1.07	1	107	50 - 150	6020	3/24/2014	17:13	032414A
	Arsenic	0.66	1	66	50 - 150	6020	3/24/2014	17:13	032414A
	Beryllium	0.44	.5	88	50 - 150	6020	3/24/2014	17:13	032414A
	Cadmium	0.39	.4	98	50 - 150	6020	3/24/2014	17:13	032414A
	Chromium	0.99	1	99	50 - 150	6020	3/24/2014	17:13	032414A
	Lead	0.37	.5	74	50 - 150	6020	3/24/2014	17:13	032414A
	Manganese	2.02	2	101	50 - 150	6020	3/24/2014	17:13	032414A
	Molybdenum	1.93	2	96	50 - 150	6020	3/24/2014	17:13	032414A
	Selenium	1.73	2	86	50 - 150	6020	3/24/2014	17:13	032414A
	Thallium	0.17	.2	85	50 - 150	6020	3/24/2014	17:13	032414A
MRL 0.1									
	Mercury	0.10	.1	100	50 - 150	7470A	3/24/2014	19:25	032414C

Total Metals
- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
ICB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	18:05	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	18:05	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/21/2014	18:05	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	18:05	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	18:39	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	18:39	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/21/2014	18:39	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	18:39	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	19:46	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	19:46	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/21/2014	19:46	032114A1
	Sodium	35.600	+/-500.000	I	29.000	500.000	6010B	3/21/2014	19:46	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	20:42	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	20:42	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/21/2014	20:42	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	20:42	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	21:34	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	21:34	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/21/2014	21:34	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	21:34	032114A1

Total Metals
- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	22:22	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	22:22	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/21/2014	22:22	032114A1
	Sodium	35.000	+/-500.000	I	29.000	500.000	6010B	3/21/2014	22:22	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	23:14	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	23:14	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/21/2014	23:14	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	23:14	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/22/2014	00:02	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/22/2014	00:02	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/22/2014	00:02	032114A1
	Sodium	29.900	+/-500.000	I	29.000	500.000	6010B	3/22/2014	00:02	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/22/2014	00:53	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/22/2014	00:53	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/22/2014	00:53	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/22/2014	00:53	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/22/2014	01:41	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/22/2014	01:41	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/22/2014	01:41	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/22/2014	01:41	032114A1

Total Metals
- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
ICB										
	Antimony	0.30	+/-1.00	i	0.16	1.00	6020	3/24/2014	17:08	032414A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/24/2014	17:08	032414A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/24/2014	17:08	032414A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/24/2014	17:08	032414A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/24/2014	17:08	032414A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/24/2014	17:08	032414A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/24/2014	17:08	032414A
	Molybdenum	0.28	+/-2.00	U	0.28	2.00	6020	3/24/2014	17:08	032414A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/24/2014	17:08	032414A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/24/2014	17:08	032414A
CCB-1										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/24/2014	17:33	032414A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/24/2014	17:33	032414A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/24/2014	17:33	032414A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/24/2014	17:33	032414A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/24/2014	17:33	032414A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/24/2014	17:33	032414A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/24/2014	17:33	032414A
	Molybdenum	0.55	+/-2.00	i	0.28	2.00	6020	3/24/2014	17:33	032414A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/24/2014	17:33	032414A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/24/2014	17:33	032414A
CCB-2										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/24/2014	18:33	032414A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/24/2014	18:33	032414A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/24/2014	18:33	032414A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/24/2014	18:33	032414A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/24/2014	18:33	032414A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/24/2014	18:33	032414A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/24/2014	18:33	032414A
	Molybdenum	0.28	+/-2.00	U	0.28	2.00	6020	3/24/2014	18:33	032414A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/24/2014	18:33	032414A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/24/2014	18:33	032414A

Total Metals
- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
CCB-3										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/24/2014	19:34	032414A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/24/2014	19:34	032414A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/24/2014	19:34	032414A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/24/2014	19:34	032414A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/24/2014	19:34	032414A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/24/2014	19:34	032414A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/24/2014	19:34	032414A
	Molybdenum	0.28	+/-2.00	U	0.28	2.00	6020	3/24/2014	19:34	032414A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/24/2014	19:34	032414A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/24/2014	19:34	032414A
CCB-4										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/24/2014	20:34	032414A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/24/2014	20:34	032414A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/24/2014	20:34	032414A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/24/2014	20:34	032414A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/24/2014	20:34	032414A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/24/2014	20:34	032414A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/24/2014	20:34	032414A
	Molybdenum	0.28	+/-2.00	U	0.28	2.00	6020	3/24/2014	20:34	032414A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/24/2014	20:34	032414A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/24/2014	20:34	032414A
ICB										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	19:24	032414C
CCB-1										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	19:41	032414C
CCB-2										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	19:56	032414C

Total Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
CCB-3										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	20:06	032414C

Total Metals

- 3b -

PREPARATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result (ug/L)	Conc Qual	Q	Acceptance Limit	MDL	MRL	Method	Analysis Date	Analysis Time	Run
MB-02131-02			**WATER**								
	Aluminum	11.000	U		+/-11.000	11.000	100.000	6010B	3/21/2014	19:05	032114A1
	Iron	9.600	I		+/-2.500	2.500	100.000	6010B	3/21/2014	19:05	032114A1
	Lithium	10.000	U		+/-10.000	10.000	100.000	6010B	3/21/2014	19:05	032114A1
	Sodium	29.000	U		+/-29.000	29.000	500.000	6010B	3/21/2014	19:05	032114A1
MB-02159-02			**WATER**								
	Mercury	0.012	U		+/-0.012	0.012	0.100	7470A	3/24/2014	19:26	032414C
MB-02134-04			**WATER**								
	Antimony	0.160	U		+/-0.160	0.160	1.000	6020	3/24/2014	17:38	032414A
	Arsenic	0.420	U		+/-0.420	0.420	1.000	6020	3/24/2014	17:38	032414A
	Beryllium	0.032	U		+/-0.032	0.032	0.500	6020	3/24/2014	17:38	032414A
	Cadmium	0.091	U		+/-0.091	0.091	0.400	6020	3/24/2014	17:38	032414A
	Chromium	0.180	U		+/-0.180	0.180	1.000	6020	3/24/2014	17:38	032414A
	Lead	0.120	U		+/-0.120	0.120	0.500	6020	3/24/2014	17:38	032414A
	Manganese	0.120	U		+/-0.120	0.120	2.000	6020	3/24/2014	17:38	032414A
	Molybdenum	0.280	U		+/-0.280	0.280	2.000	6020	3/24/2014	17:38	032414A
	Selenium	1.100	U		+/-1.100	1.100	2.000	6020	3/24/2014	17:38	032414A
	Thallium	0.050	U		+/-0.050	0.050	0.200	6020	3/24/2014	17:38	032414A

Total Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

ICS Source: **Instrument ID:** PE Optima ICP

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Method	Analysis Date	Analysis Time	Run Number
ICSA									
	Aluminum	753000	750000	100	80 - 120%	6010B	3/21/2014	18:19	032114A1
	Iron	668000	750000	89	80 - 120%	6010B	3/21/2014	18:19	032114A1
	Lithium	-6			0.0 to 0.0	6010B	3/21/2014	18:19	032114A1
	Sodium	34			0.0 to 0.0	6010B	3/21/2014	18:19	032114A1
ICSAB									
	Aluminum	766000	752000	102	80 - 120%	6010B	3/21/2014	18:27	032114A1
	Iron	677000	752000	90	80 - 120%	6010B	3/21/2014	18:27	032114A1
	Lithium	2250.0	2000	112	80 - 120%	6010B	3/21/2014	18:27	032114A1
	Sodium	11200	10000	112	80 - 120%	6010B	3/21/2014	18:27	032114A1
ICSA									
	Aluminum	757000	750000	101	80 - 120%	6010B	3/22/2014	01:21	032114A1
	Iron	667000	750000	89	80 - 120%	6010B	3/22/2014	01:21	032114A1
	Lithium	-5			0.0 to 0.0	6010B	3/22/2014	01:21	032114A1
	Sodium	28			0.0 to 0.0	6010B	3/22/2014	01:21	032114A1
ICSAB									
	Aluminum	770000	752000	102	80 - 120%	6010B	3/22/2014	01:29	032114A1
	Iron	678000	752000	90	80 - 120%	6010B	3/22/2014	01:29	032114A1
	Lithium	2300.0	2000	115	80 - 120%	6010B	3/22/2014	01:29	032114A1
	Sodium	11400	10000	114	80 - 120%	6010B	3/22/2014	01:29	032114A1
ICSA									
	Antimony	0.1			-2.0 to 2.0	6020	3/24/2014	17:18	032414A
	Arsenic	0.7			-2.0 to 2.0	6020	3/24/2014	17:18	032414A
	Beryllium	-0.074			-1.000 to 1.000	6020	3/24/2014	17:18	032414A
	Cadmium	0.1			-0.8 to 0.8	6020	3/24/2014	17:18	032414A
	Chromium	1.0			-2.0 to 2.0	6020	3/24/2014	17:18	032414A
	Lead	0.0			-1.0 to 2.0	6020	3/24/2014	17:18	032414A
	Manganese	0.3			-4.0 to 4.0	6020	3/24/2014	17:18	032414A
	Molybdenum	1110.0	1000	111	80 - 120%	6020	3/24/2014	17:18	032414A
	Selenium	-1.7			-4.0 to 4.0	6020	3/24/2014	17:18	032414A
	Thallium	0.0			-0.4 to 0.4	6020	3/24/2014	17:18	032414A

Total Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

ICS Source: **Instrument ID:** ICP-MS

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Method	Analysis Date	Analysis Time	Run Number
ICSAB									
	Antimony	20.7	20	104	80 - 120%	6020	3/24/2014	17:23	032414A
	Arsenic	20.9	20	104	80 - 120%	6020	3/24/2014	17:23	032414A
	Beryllium	10.200	10	102	80 - 120%	6020	3/24/2014	17:23	032414A
	Cadmium	8.2	8	102	80 - 120%	6020	3/24/2014	17:23	032414A
	Chromium	21.8	20	109	80 - 120%	6020	3/24/2014	17:23	032414A
	Lead	10.1	10	101	80 - 120%	6020	3/24/2014	17:23	032414A
	Manganese	41.6	40	104	80 - 120%	6020	3/24/2014	17:23	032414A
	Molybdenum	1110.0	1040	107	80 - 120%	6020	3/24/2014	17:23	032414A
	Selenium	39.3	40	98	80 - 120%	6020	3/24/2014	17:23	032414A
	Thallium	4.0	4	100	80 - 120%	6020	3/24/2014	17:23	032414A

Total Metals
- 5a -
MATRIX SPIKE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-003 **Client ID:** GAIN-HG-24S-031814S

Percent Solids for Sample: 0.00 **Spiked ID:** J1402025-003S **Percent Solids for Spike Sample:** 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Mercury	ug/L	75 - 125	1.23		0.01	U	1.25	98		7470A

Total Metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-003 **Client ID:** GAIN-HG-24S-031814SD

Percent Solids for Sample: 0.00 **Spiked ID:** J1402025-003SD **Percent Solids for Spike Sample:** 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Mercury	ug/L	75 - 125	1.23		0.01	U	1.25	98		7470A

Total Metals
- 5a -
MATRIX SPIKE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-007 **Client ID:** GAIN-HG-22D-031914S

Percent Solids for Sample: 0.00 **Spiked ID:** J1402025-007S **Percent Solids for Spike Sample:** 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Aluminum	ug/L	75 - 125	5380.000		165.000		5000	104		6010B
Iron	ug/L	75 - 125	6100.000		927.000		5000	103		6010B
Lithium	ug/L	75 - 125	5130.0000		10.0000	U	5000	103		6010B
Sodium	ug/L	75 - 125	28700.000		2810.000		25000	104		6010B

Total Metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-007 **Client ID:** GAIN-HG-22D-031914SD

Percent Solids for Sample: 0.00 **Spiked ID:** J1402025-007SD **Percent Solids for Spike Sample:** 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Aluminum	ug/L	75 - 125	5270.000		165.000		5000	102		6010B
Iron	ug/L	75 - 125	6090.000		927.000		5000	103		6010B
Lithium	ug/L	75 - 125	5140.0000		10.0000	U	5000	103		6010B
Sodium	ug/L	75 - 125	28800.000		2810.000		25000	104		6010B

Total Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-HG-24S-031814A

Sample ID: J1402025-003 **Spiked ID:** J1402025-003A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Mercury	ug/L	75 - 125	4.93		0.01	U	5	98		7470A

Total Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-HG-22D-031914A

Sample ID: J1402025-007 **Spiked ID:** J1402025-007A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Aluminum	ug/L	75 - 125	5240.000		165.000		5000	102		6010B
Iron	ug/L	75 - 125	5940.000		927.000		5000	100		6010B
Lithium	ug/L	75 - 125	5210.00		10.00	U	5000	104		6010B
Sodium	ug/L	75 - 125	28800.000		2810.000		25000	104		6010B

Total Metals
- 6 -
DUPLICATE SAMPLE SUMMARY

Client: Beazer East, Inc. Level: LOW SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Matrix: WATER Sample ID: J1402025-007S Client ID: GAIN-HG-22D-031914SD

Percent Solids for Sample: 0.00 Duplicate ID: J1402025-007SD Percent Solids for Duplicate: 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	Method
Aluminum	ug/L	0 - 30	5380.000		5270.000		2		6010B
Iron	ug/L	0 - 30	6100.000		6090.000		0		6010B
Lithium	ug/L	0 - 30	5130.0000		5140.0000		0.2		6010B
Sodium	ug/L	0 - 30	28700.000		28800.000		0		6010B

Total Metals
- 6 -
DUPLICATE SAMPLE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-003S **Client ID:** GAIN-HG-24S-031814SD

Percent Solids for Sample: 0.00 **Duplicate ID:** J1402025-003SD **Percent Solids for Duplicate:** 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	Method
Mercury	ug/L	0 - 30	1.23		1.23		0		7470A

Total Metals

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Aqueous LCS Source: High Purity STDs **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	Method
LCS-02131-01								
	Aluminum	ug/L	5000	5020		100	80.0 - 120.0	6010B
	Iron	ug/L	5000	5030		101	80.0 - 120.0	6010B
	Lithium	ug/L	5000	5050		101	80.0 - 120.0	6010B
	Sodium	ug/L	25000	25400		102	80.0 - 120.0	6010B

Total Metals

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Aqueous LCS Source: Inorganic Ventures **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	Method
LCS-02134-03								
	Antimony	ug/L	50	51.7		103	80.0 - 120.0	6020
	Arsenic	ug/L	50	52.0		104	80.0 - 120.0	6020
	Beryllium	ug/L	25	26.5		106	80.0 - 120.0	6020
	Cadmium	ug/L	20	21.2		106	80.0 - 120.0	6020
	Chromium	ug/L	50	52.0		104	80.0 - 120.0	6020
	Lead	ug/L	25	26.6		106	80.0 - 120.0	6020
	Manganese	ug/L	100	105.0		105	80.0 - 120.0	6020
	Molybdenum	ug/L	100	104.0		104	80.0 - 120.0	6020
	Selenium	ug/L	100	103.0		103	80.0 - 120.0	6020
	Thallium	ug/L	10	10.3		103	80.0 - 120.0	6020

Total Metals
- 7 -
LABORATORY CONTROL SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Aqueous LCS Source: Inorganic Ventures **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	Method
LCS-02159-01								
	Mercury	ug/L	1.25	1.22		98	80.0 - 120.0	7470A

Total Metals

- 9 -

SERIAL DILUTION SAMPLE SUMMARY

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Matrix: WATER Level: LOW Client ID: GAIN-HG-22D-031914L

Sample ID: J1402025-007 Serial Dilution ID: J1402025-007L

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	Method
Aluminum	165.000		101.000	I	38.8		10.00 %	6010B
Iron	927.000		1140.000		23.0	E	10.00 %	6010B
Lithium	10.000	U	10.000	U			10.00 %	6010B
Sodium	2809.000		2961.000		5.4		10.00 %	6010B

Total Metals

- 9 -

SERIAL DILUTION SAMPLE SUMMARY

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Matrix: WATER Level: LOW Client ID: GAIN-HG-24S-031814L

Sample ID: J1402025-003 Serial Dilution ID: J1402025-003L

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	Method
Mercury	0.01	U	0.01	U			10.00 %	7470A

Total Metals
- 10 -
METHOD DETECTION LIMITS

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Analyte	Wave- length (nm)	MDL ug/L	MRL ug/L
Cetac Hg Analyzer		**Date:**	1/11/2012
Mercury	253.70	0.012	0.100
ICP-MS		**Date:**	1/20/2012
Antimony	123	0.16	1.00
Arsenic	75	0.42	1.00
Beryllium	9	0.032	0.50
Cadmium	114	0.09	0.40
Chromium	52	0.18	1.00
Lead	208	0.12	0.50
Manganese	55	0.12	2.00
Molybdenum	98	0.28	2.00
Selenium	82	1.10	2.00
Thallium	205	0.050	0.20
PE Optima ICP		**Date:**	2/3/2012
Aluminum	308.215	11.00	100.00
Iron	273.955	2.50	100.00
Lithium	610.784	10.00	100.00
Sodium	589.592	29.00	500.00

Total Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Beazer East, Inc.

SDG No.: J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK

Method: P

Case No.: **SAS No.:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: 204592							
MB-02131-02	MB-02131-02	MB	WATER	3/21/14	50.0	50.0	
LCS-02131-01	LCS-02131-01	LCS	WATER	3/21/14	50.0	50.0	
J1402025-001	GAIN-M-25A-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-002	GAIN-M-36B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-003	GAIN-HG-24S-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-004	GAIN-M-25B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-005	GAIN-HG-33S-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-006	GAIN-HG-34S-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-007	GAIN-HG-22D-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-007S	GAIN-HG-22D-031914S	MS	WATER	3/21/14	50.0	50.0	
J1402025-007SD	GAIN-HG-22D-031914SD	MSD	WATER	3/21/14	50.0	50.0	

Total Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Beazer East, Inc.

SDG No.: J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK

Method: MS

Case No.: **SAS No.:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	204596						
MB-02134-04	MB-02134-04	MB	WATER	3/21/14	50.0	50.0	
LCS-02134-03	LCS-02134-03	LCS	WATER	3/21/14	50.0	50.0	
J1402025-001	GAIN-M-25A-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-002	GAIN-M-36B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-003	GAIN-HG-24S-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-004	GAIN-M-25B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-005	GAIN-HG-33S-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-006	GAIN-HG-34S-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-007	GAIN-HG-22D-031914	SAM	WATER	3/21/14	50.0	50.0	

Total Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Method:** CV

Case No.: **SAS No.:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	204622						
MB-02159-02	MB-02159-02	MB	WATER	3/21/14	40.0	40.0	
LCS-02159-01	LCS-02159-01	LCS	WATER	3/21/14	40.0	40.0	
J1402025-001	GAIN-M-25A-031814	SAM	WATER	3/21/14	40.0	40.0	
J1402025-002	GAIN-M-36B-031814	SAM	WATER	3/21/14	40.0	40.0	
J1402025-003	GAIN-HG-24S-031814	SAM	WATER	3/21/14	40.0	40.0	
J1402025-003S	GAIN-HG-24S-031814S	MS	WATER	3/21/14	40.0	40.0	
J1402025-003SD	GAIN-HG-24S-031814SD	MSD	WATER	3/21/14	40.0	40.0	
J1402025-004	GAIN-M-25B-031814	SAM	WATER	3/21/14	40.0	40.0	
J1402025-005	GAIN-HG-33S-031914	SAM	WATER	3/21/14	40.0	40.0	
J1402025-006	GAIN-HG-34S-031914	SAM	WATER	3/21/14	40.0	40.0	
J1402025-007	GAIN-HG-22D-031914	SAM	WATER	3/21/14	40.0	40.0	

Total Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
CALIB BLANK	1.00	1741		X										X									X					*
CALIB STD 1	1.00	1746		X										X									X					*
CALIB STD 2	1.00	1751		X										X									X					*
CALIB STD 3	1.00	1755		X										X									X					*
CALIB STD 4	1.00	1758		X										X									X					*
ICV	1.00	1801		X										X									X					*
ICB	1.00	1805		X										X									X					*
ZZZZZZ	1.00	1810																										
MRL	1.00	1815		X										X									X					*
ICSA	1.00	1819		X										X									X					*
ICSAB	1.00	1827		X										X									X					*
CCV	1.00	1835		X										X									X					*
CCB	1.00	1839		X										X									X					*
ZZZZZZ	2.00	1844																										
ZZZZZZ	5.00	1852																										
ZZZZZZ	2.00	1857																										
MB-02131-02	1.00	1905		X										X									X					*
LCS-02131-01	1.00	1910		X										X									X					*
ZZZZZZ	1.00	1914																										
ZZZZZZ	1.00	1923																										
ZZZZZZ	1.00	1928																										
ZZZZZZ	1.00	1933																										
ZZZZZZ	1.00	1938																										
CCV	1.00	1942		X										X									X					*
CCB	1.00	1946		X										X									X					*
ZZZZZZ	1.00	1951																										
ZZZZZZ	1.00	1955																										
ZZZZZZ	1.00	2000																										
ZZZZZZ	1.00	2005																										
ZZZZZZ	1.00	2010																										
ZZZZZZ	1.00	2015																										
ZZZZZZ	1.00	2019																										
GAIN-M-25A-031814	1.00	2024		X										X									X					*
GAIN-M-36B-031814	1.00	2029		X										X									X					*
GAIN-HG-24S-031814	1.00	2034		X										X									X					*
CCV	1.00	2038		X										X									X					*

Total Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
CCB	1.00	2042		X										X									X					*
GAIN-M-25B-031814	1.00	2047		X										X									X					*
GAIN-HG-33S-031914	1.00	2052		X										X									X					*
GAIN-HG-34S-031914	1.00	2057		X										X									X					*
GAIN-HG-22D-031914	1.00	2102		X										X									X					*
GAIN-HG-22D-031914S	1.00	2106		X										X									X					*
GAIN-HG-22D-031914S	1.00	2109		X										X									X					*
GAIN-HG-22D-031914L	5.00	2113		X										X									X					*
GAIN-HG-22D-031914A	1.00	2117		X										X									X					*
ZZZZZZ	1.00	2121																										
ZZZZZZ	1.00	2126																										
CCV	1.00	2130		X										X									X					*
CCB	1.00	2134		X										X									X					*
ZZZZZZ	1.00	2138																										
ZZZZZZ	1.00	2142																										
ZZZZZZ	1.00	2146																										
ZZZZZZ	1.00	2149																										
ZZZZZZ	5.00	2153																										
ZZZZZZ	1.00	2157																										
ZZZZZZ	1.00	2201																										
ZZZZZZ	1.00	2206																										
ZZZZZZ	1.00	2210																										
ZZZZZZ	1.00	2214																										
CCV	1.00	2218		X										X									X					*
CCB	1.00	2222		X										X									X					*
ZZZZZZ	1.00	2227																										
ZZZZZZ	1.00	2232																										
ZZZZZZ	1.00	2236																										
ZZZZZZ	1.00	2239																										
ZZZZZZ	5.00	2243																										
ZZZZZZ	1.00	2247																										
ZZZZZZ	1.00	2251																										
ZZZZZZ	1.00	2256																										
ZZZZZZ	1.00	2301																										
ZZZZZZ	1.00	2306																										
CCV	1.00	2311		X										X									X					*

Total Metals

14

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
CCB	1.00	2314		X										X									X					*
ZZZZZZ	1.00	2319																										
ZZZZZZ	1.00	2323																										
ZZZZZZ	1.00	2327																										
ZZZZZZ	1.00	2331																										
ZZZZZZ	1.00	2335																										
ZZZZZZ	5.00	2338																										
ZZZZZZ	1.00	2343																										
ZZZZZZ	1.00	2346																										
ZZZZZZ	1.00	2351																										
ZZZZZZ	1.00	2356																										
CCV	1.00	2359		X										X									X					*
CCB	1.00	0002		X										X									X					*
ZZZZZZ	1.00	0007																										
ZZZZZZ	1.00	0013																										
ZZZZZZ	1.00	0017																										
ZZZZZZ	1.00	0022																										
ZZZZZZ	1.00	0025																										
ZZZZZZ	1.00	0030																										
ZZZZZZ	1.00	0035																										
ZZZZZZ	1.00	0038																										
ZZZZZZ	5.00	0041																										
ZZZZZZ	1.00	0046																										
CCV	1.00	0049		X										X									X					*
CCB	1.00	0053		X										X									X					*
ZZZZZZ	1.00	0057																										
ZZZZZZ	1.00	0102																										
ZZZZZZ	1.00	0107																										
ZZZZZZ	1.00	0112																										
ZZZZZZ	1.00	0117																										
ICSA	1.00	0121		X										X									X					*
ICSAB	1.00	0129		X										X									X					*
CCV	1.00	0137		X										X									X					*
CCB	1.00	0141		X										X									X					*

Total Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: ICP-MS Method: MS Run Number: 032414A

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
Cal Blank	1.00	1637			X	X		X	X		X				X		X				X			X				*
Cal 1	1.00	1643			X	X		X	X		X				X		X				X			X				*
Cal 2	1.00	1648			X	X		X	X		X				X		X				X			X				*
Cal 3	1.00	1653			X	X		X	X		X				X		X				X			X				*
Cal 4	1.00	1658			X	X		X	X		X				X		X				X			X				*
ICV	1.00	1703			X	X		X	X		X				X		X				X			X				*
ICB	1.00	1708			X	X		X	X		X				X		X				X			X				*
MRL	1.00	1713			X	X		X	X		X				X		X				X			X				*
ICSA	1.00	1718			X	X		X	X		X				X		X				X			X				*
ICSAB	1.00	1723			X	X		X	X		X				X		X				X			X				*
CCV-1	1.00	1728			X	X		X	X		X				X		X				X			X				*
CCB-1	1.00	1733			X	X		X	X		X				X		X				X			X				*
MB-02134-04	1.00	1738			X	X		X	X		X				X		X				X			X				*
LCS-02134-03	1.00	1743			X	X		X	X		X				X		X				X			X				*
ZZZZZZ	1.00	1748																										
ZZZZZZ	1.00	1753																										
ZZZZZZ	1.00	1758																										
ZZZZZZ	1.00	1803																										
GAIN-M-25A-031814	1.00	1808			X	X		X	X		X				X		X				X			X				*
GAIN-M-36B-031814	1.00	1813			X	X		X	X		X				X		X				X			X				*
GAIN-HG-24S-031814	1.00	1818			X	X		X	X		X				X		X				X			X				*
GAIN-M-25B-031814	1.00	1823			X	X		X	X		X				X		X				X			X				*
CCV-2	1.00	1828			X	X		X	X		X				X		X				X			X				*
CCB-2	1.00	1833			X	X		X	X		X				X		X				X			X				*
GAIN-HG-33S-031914	1.00	1838			X	X		X	X		X				X		X				X			X				*
GAIN-HG-34S-031914	1.00	1843			X	X		X	X		X				X		X				X			X				*
GAIN-HG-22D-031914	1.00	1848			X	X		X	X		X				X		X				X			X				*
ZZZZZZ	1.00	1853																										
ZZZZZZ	1.00	1858																										
ZZZZZZ	1.00	1903																										
ZZZZZZ	5.00	1908																										
ZZZZZZ	1.00	1913																										
ZZZZZZ	1.00	1919																										
ZZZZZZ	1.00	1924																										
CCV-3	1.00	1929			X	X		X	X		X				X		X				X			X				*
CCB-3	1.00	1934			X	X		X	X		X				X		X				X			X				*

Total Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: ICP-MS Method: MS Run Number: 032414A

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
ZZZZZZ	1.00	1939																										
ZZZZZZ	1.00	1944																										
ZZZZZZ	1.00	1949																										
ZZZZZZ	1.00	1954																										
ZZZZZZ	1.00	1959																										
ZZZZZZ	1.00	2004																										
ZZZZZZ	1.00	2009																										
ZZZZZZ	1.00	2014																										
ZZZZZZ	1.00	2019																										
ZZZZZZ	1.00	2024																										
CCV-4	1.00	2029			X	X		X	X		X				X		X				X			X				*
CCB-4	1.00	2034			X	X		X	X		X				X		X				X			X				*

Total Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: Cetac Hg Analyzer Method: CV Run Number: 032414C

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Calibration Blank	1.00	1910																X									
Standard #1	1.00	1911																X									
Standard #2	1.00	1912																X									
Standard #3	1.00	1914																X									
Standard #4	1.00	1916																X									
Standard #5	1.00	1917																X									
Standard #6	1.00	1919																X									
ICV	1.00	1922																X									
ICB	1.00	1924																X									
MRL 0.1	1.00	1925																X									
MB-02159-02	1.00	1926																X									
LCS-02159-01	1.00	1927																X									
ZZZZZZ	1.00	1929																									
ZZZZZZ	1.00	1930																									
ZZZZZZ	1.00	1931																									
ZZZZZZ	1.00	1932																									
GAIN-M-25A-031814	1.00	1933																X									
GAIN-M-36B-031814	1.00	1935																X									
GAIN-HG-24S-031814	1.00	1936																X									
GAIN-HG-24S-031814S	1.00	1937																X									
CCV-1	1.00	1939																X									
CCB-1	1.00	1941																X									
GAIN-HG-24S-031814S	1.00	1942																X									
GAIN-HG-24S-031814A	1.00	1943																X									
GAIN-HG-24S-031814L	5.00	1945																X									
GAIN-M-25B-031814	1.00	1947																X									
GAIN-HG-33S-031914	1.00	1948																X									
GAIN-HG-34S-031914	1.00	1949																X									
GAIN-HG-22D-031914	1.00	1950																X									
ZZZZZZ	1.00	1951																									
ZZZZZZ	1.00	1952																									
ZZZZZZ	1.00	1953																									
CCV-2	1.00	1954																X									
CCB-2	1.00	1956																X									
ZZZZZZ	1.00	1958																									
ZZZZZZ	1.00	1959																									

Total Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: Cetac Hg Analyzer Method: CV Run Number: 032414C

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	2000																									
ZZZZZZ	1.00	2001																									
ZZZZZZ	1.00	2002																									
ZZZZZZ	1.00	2003																									
CCV-3	1.00	2004																	X								
CCB-3	1.00	2006																	X								

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN								
CALIB BLANK	1.00	17:41				X																					
CALIB STD 1	1.00	17:46				X																					
CALIB STD 2	1.00	17:51				X																					
CALIB STD 3	1.00	17:55				X																					
CALIB STD 4	1.00	17:58				X																					
ICV	1.00	18:01				X																					
ICB	1.00	18:05				X																					
ZZZZZZ	1.00	18:10																									
MRL	1.00	18:15				X																					
ICSA	1.00	18:19				X																					
ICSAB	1.00	18:27				X																					
CCV	1.00	18:35				X																					
CCB	1.00	18:39				X																					
ZZZZZZ	2.00	18:44																									
ZZZZZZ	5.00	18:52																									
ZZZZZZ	2.00	18:57																									
MB-02131-02	1.00	19:05				X																					
LCS-02131-01	1.00	19:10				X																					
ZZZZZZ	1.00	19:14																									
ZZZZZZ	1.00	19:23																									
ZZZZZZ	1.00	19:28																									
ZZZZZZ	1.00	19:33																									
ZZZZZZ	1.00	19:38																									
CCV	1.00	19:42				X																					
CCB	1.00	19:46				X																					
ZZZZZZ	1.00	19:51																									
ZZZZZZ	1.00	19:55																									
ZZZZZZ	1.00	20:00																									
ZZZZZZ	1.00	20:05																									
ZZZZZZ	1.00	20:10																									
ZZZZZZ	1.00	20:15																									
ZZZZZZ	1.00	20:19																									

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN
GAIN-M-25A-031814	1.00	20:24				X													
GAIN-M-36B-031814	1.00	20:29				X													
GAIN-HG-24S-031814	1.00	20:34				X													
CCV	1.00	20:38				X													
CCB	1.00	20:42				X													
GAIN-M-25B-031814	1.00	20:47				X													
GAIN-HG-33S-031914	1.00	20:52				X													
GAIN-HG-34S-031914	1.00	20:57				X													
GAIN-HG-22D-031914	1.00	21:02				X													
GAIN-HG-22D-031914	1.00	21:06				X													
GAIN-HG-22D-031914	1.00	21:09				X													
GAIN-HG-22D-031914	5.00	21:13				X													
GAIN-HG-22D-031914	1.00	21:17				X													
ZZZZZZ	1.00	21:21																	
ZZZZZZ	1.00	21:26																	
CCV	1.00	21:30				X													
CCB	1.00	21:34				X													
ZZZZZZ	1.00	21:38																	
ZZZZZZ	1.00	21:42																	
ZZZZZZ	1.00	21:46																	
ZZZZZZ	1.00	21:49																	
ZZZZZZ	5.00	21:53																	
ZZZZZZ	1.00	21:57																	
ZZZZZZ	1.00	22:01																	
ZZZZZZ	1.00	22:06																	
ZZZZZZ	1.00	22:10																	
ZZZZZZ	1.00	22:14																	
CCV	1.00	22:18				X													
CCB	1.00	22:22				X													
ZZZZZZ	1.00	22:27																	
ZZZZZZ	1.00	22:32																	
ZZZZZZ	1.00	22:36																	

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN								
ZZZZZZ	1.00	22:39																									
ZZZZZZ	5.00	22:43																									
ZZZZZZ	1.00	22:47																									
ZZZZZZ	1.00	22:51																									
ZZZZZZ	1.00	22:56																									
ZZZZZZ	1.00	23:01																									
ZZZZZZ	1.00	23:06																									
CCV	1.00	23:11				X																					
CCB	1.00	23:14				X																					
ZZZZZZ	1.00	23:19																									
ZZZZZZ	1.00	23:23																									
ZZZZZZ	1.00	23:27																									
ZZZZZZ	1.00	23:31																									
ZZZZZZ	1.00	23:35																									
ZZZZZZ	5.00	23:38																									
ZZZZZZ	1.00	23:43																									
ZZZZZZ	1.00	23:46																									
ZZZZZZ	1.00	23:51																									
ZZZZZZ	1.00	23:56																									
CCV	1.00	23:59				X																					
CCB	1.00	00:02				X																					
ZZZZZZ	1.00	00:07																									
ZZZZZZ	1.00	00:13																									
ZZZZZZ	1.00	00:17																									
ZZZZZZ	1.00	00:22																									
ZZZZZZ	1.00	00:25																									
ZZZZZZ	1.00	00:30																									
ZZZZZZ	1.00	00:35																									
ZZZZZZ	1.00	00:38																									
ZZZZZZ	5.00	00:41																									
ZZZZZZ	1.00	00:46																									
CCV	1.00	00:49				X																					

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN								
CCB	1.00	00:53				X																					
ZZZZZZ	1.00	00:57																									
ZZZZZZ	1.00	01:02																									
ZZZZZZ	1.00	01:07																									
ZZZZZZ	1.00	01:12																									
ZZZZZZ	1.00	01:17																									
ICSA	1.00	01:21				X																					
ICSAB	1.00	01:29				X																					
CCV	1.00	01:37				X																					
CCB	1.00	01:41				X																					

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: ICP-MS Method: MS Run Number: 032414A

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes															
				B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN
Cal Blank	1.00	16:37					X												
Cal 1	1.00	16:43					X												
Cal 2	1.00	16:48					X												
Cal 3	1.00	16:53					X												
Cal 4	1.00	16:58					X												
ICV	1.00	17:03					X												
ICB	1.00	17:08					X												
MRL	1.00	17:13					X												
ICSA	1.00	17:18					X												
ICSAB	1.00	17:23					X												
CCV-1	1.00	17:28					X												
CCB-1	1.00	17:33					X												
MB-02134-04	1.00	17:38					X												
LCS-02134-03	1.00	17:43					X												
ZZZZZZ	1.00	17:48																	
ZZZZZZ	1.00	17:53																	
ZZZZZZ	1.00	17:58																	
ZZZZZZ	1.00	18:03																	
GAIN-M-25A-031814	1.00	18:08					X												
GAIN-M-36B-031814	1.00	18:13					X												
GAIN-HG-24S-031814	1.00	18:18					X												
GAIN-M-25B-031814	1.00	18:23					X												
CCV-2	1.00	18:28					X												
CCB-2	1.00	18:33					X												
GAIN-HG-33S-031914	1.00	18:38					X												
GAIN-HG-34S-031914	1.00	18:43					X												
GAIN-HG-22D-031914	1.00	18:48					X												
ZZZZZZ	1.00	18:53																	
ZZZZZZ	1.00	18:58																	
ZZZZZZ	1.00	19:03																	
ZZZZZZ	5.00	19:08																	
ZZZZZZ	1.00	19:13																	

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: ICP-MS Method: MS Run Number: 032414A

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN								
ZZZZZZ	1.00	19:19																									
ZZZZZZ	1.00	19:24																									
CCV-3	1.00	19:29					X																				
CCB-3	1.00	19:34					X																				
ZZZZZZ	1.00	19:39																									
ZZZZZZ	1.00	19:44																									
ZZZZZZ	1.00	19:49																									
ZZZZZZ	1.00	19:54																									
ZZZZZZ	1.00	19:59																									
ZZZZZZ	1.00	20:04																									
ZZZZZZ	1.00	20:09																									
ZZZZZZ	1.00	20:14																									
ZZZZZZ	1.00	20:19																									
ZZZZZZ	1.00	20:24																									
CCV-4	1.00	20:29					X																				
CCB-4	1.00	20:34					X																				

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: Cetac Hg Analyzer Method: CV Run Number: 032414C

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN								
Calibration Blank	1.00	19:10																									
Standard #1	1.00	19:11																									
Standard #2	1.00	19:12																									
Standard #3	1.00	19:14																									
Standard #4	1.00	19:16																									
Standard #5	1.00	19:17																									
Standard #6	1.00	19:19																									
ICV	1.00	19:22																									
ICB	1.00	19:24																									
MRL 0.1	1.00	19:25																									
MB-02159-02	1.00	19:26																									
LCS-02159-01	1.00	19:27																									
ZZZZZZ	1.00	19:29																									
ZZZZZZ	1.00	19:30																									
ZZZZZZ	1.00	19:31																									
ZZZZZZ	1.00	19:32																									
GAIN-M-25A-031814	1.00	19:33																									
GAIN-M-36B-031814	1.00	19:35																									
GAIN-HG-24S-031814	1.00	19:36																									
GAIN-HG-24S-031814	1.00	19:37																									
CCV-1	1.00	19:39																									
CCB-1	1.00	19:41																									
GAIN-HG-24S-031814	1.00	19:42																									
GAIN-HG-24S-031814	1.00	19:43																									
GAIN-HG-24S-031814	5.00	19:45																									
GAIN-M-25B-031814	1.00	19:47																									
GAIN-HG-33S-031914	1.00	19:48																									
GAIN-HG-34S-031914	1.00	19:49																									
GAIN-HG-22D-031914	1.00	19:50																									
ZZZZZZ	1.00	19:51																									
ZZZZZZ	1.00	19:52																									
ZZZZZZ	1.00	19:53																									

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: Cetac Hg Analyzer Method: CV Run Number: 032414C

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN								
CCV-2	1.00	19:54																									
CCB-2	1.00	19:56																									
ZZZZZZ	1.00	19:58																									
ZZZZZZ	1.00	19:59																									
ZZZZZZ	1.00	20:00																									
ZZZZZZ	1.00	20:01																									
ZZZZZZ	1.00	20:02																									
ZZZZZZ	1.00	20:03																									
CCV-3	1.00	20:04																									
CCB-3	1.00	20:06																									

Dissolved Metals
- COVER PAGE -
INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc.

SDG No.: J1402025 Method Type: 6010B/6020/74 SOW No.:

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Lab Sample ID	Client Sample ID	QC Description
J1402025-001	GAIN-M-25A-031814	
J1402025-001S	GAIN-M-25A-031814S	Matrix Spike
J1402025-001SD	GAIN-M-25A-031814SD	Matrix Spike Duplicate
J1402025-002	GAIN-M-36B-031814	
J1402025-002S	GAIN-M-36B-031814S	Matrix Spike
J1402025-002SD	GAIN-M-36B-031814SD	Matrix Spike Duplicate
J1402025-003	GAIN-HG-24S-031814	
J1402025-004	GAIN-M-25B-031814	
J1402025-005	GAIN-HG-33S-031914	
J1402025-006	GAIN-HG-34S-031914	
J1402025-007	GAIN-HG-22D-031914	
J1402025-007S	GAIN-HG-22D-031914S	Matrix Spike
J1402025-007SD	GAIN-HG-22D-031914SD	Matrix Spike Duplicate

Were ICP interelement corrections applied?	Yes/No	Yes
Were ICP background corrections applied?	Yes/No	Yes
If yes - were raw data generated before applications of background corrections?	Yes/No	No

Comments: Perkin Elmer MSF program is used for IEC corrections

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Name: Craig Myers

Date: 4/8/14 Title: Project Manager

Dissolved Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-001 **Client ID:** GAIN-M-25A-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204591 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	112	ug/L			6010B	11	100	1.00	3/22/2014	00:25:55
Antimony	1.6	ug/L			6020	0.160	1.0	1.00	3/27/2014	00:13
Arsenic	0.51	ug/L	i		6020	0.42	1.0	1.00	3/27/2014	00:13
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/27/2014	00:13
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/27/2014	00:13
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/27/2014	00:13
Iron	2.5	ug/L	U		6010B	2.5	100	1.00	3/22/2014	00:25:55
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/27/2014	00:13
Manganese	0.4	ug/L	i		6020	0.1	2.0	1.00	3/27/2014	00:13
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	17:01:52
Molybdenum	2.70	ug/L			6020	0.28	2.00	1.00	3/27/2014	00:13
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/27/2014	00:13
Sodium	1590	ug/L			6010B	29	500	1.00	3/22/2014	00:25:55
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/27/2014	00:13

Comments:

Dissolved Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-002 **Client ID:** GAIN-M-36B-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204591 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	110	ug/L			6010B	11	100	1.00	3/22/2014	00:30:47
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/27/2014	00:18
Arsenic	0.42	ug/L	U		6020	0.42	1.0	1.00	3/27/2014	00:18
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/27/2014	00:18
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/27/2014	00:18
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/27/2014	00:18
Iron	753	ug/L			6010B	2.5	100	1.00	3/22/2014	00:30:47
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/27/2014	00:18
Manganese	27	ug/L			6020	0.1	2.0	1.00	3/27/2014	00:18
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	17:09:33
Molybdenum	2.20	ug/L			6020	0.28	2.00	1.00	3/27/2014	00:18
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/27/2014	00:18
Sodium	6770	ug/L			6010B	29	500	1.00	3/22/2014	00:30:47
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/27/2014	00:18

Comments:

Dissolved Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-003 **Client ID:** GAIN-HG-24S-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204591 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	96	ug/L	I		6010B	11	100	1.00	3/22/2014	00:57:58
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/27/2014	00:23
Arsenic	2.4	ug/L			6020	0.42	1.0	1.00	3/27/2014	00:23
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/27/2014	00:23
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/27/2014	00:23
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/27/2014	00:23
Iron	744	ug/L			6010B	2.5	100	1.00	3/22/2014	00:57:58
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/27/2014	00:23
Manganese	27	ug/L			6020	0.1	2.0	1.00	3/27/2014	00:23
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	17:10:42
Molybdenum	5.80	ug/L			6020	0.28	2.00	1.00	3/27/2014	00:23
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/27/2014	00:23
Sodium	5490	ug/L			6010B	29	500	1.00	3/22/2014	00:57:58
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/27/2014	00:23

Comments:

Dissolved Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-004 **Client ID:** GAIN-M-25B-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204591 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	95	ug/L	I		6010B	11	100	1.00	3/22/2014	01:02:51
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/27/2014	00:28
Arsenic	3.2	ug/L			6020	0.42	1.0	1.00	3/27/2014	00:28
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/27/2014	00:28
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/27/2014	00:28
Chromium	0.45	ug/L	i		6020	0.18	1.0	1.00	3/27/2014	00:28
Iron	245	ug/L			6010B	2.5	100	1.00	3/22/2014	01:02:51
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/27/2014	00:28
Manganese	63	ug/L			6020	0.1	2.0	1.00	3/27/2014	00:28
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	17:11:51
Molybdenum	0.28	ug/L	U		6020	0.28	2.00	1.00	3/27/2014	00:28
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/27/2014	00:28
Sodium	17500	ug/L			6010B	29	500	1.00	3/22/2014	01:02:51
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/27/2014	00:28

Comments:

Dissolved Metals

- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-005 **Client ID:** GAIN-HG-33S-031914

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204591 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	99	ug/L	I		6010B	11	100	1.00	3/22/2014	01:07:43
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/27/2014	00:43
Arsenic	0.42	ug/L	U		6020	0.42	1.0	1.00	3/27/2014	00:43
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/27/2014	00:43
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/27/2014	00:43
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/27/2014	00:43
Iron	887	ug/L			6010B	2.5	100	1.00	3/22/2014	01:07:43
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/27/2014	00:43
Manganese	27	ug/L			6020	0.1	2.0	1.00	3/27/2014	00:43
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	17:16:12
Molybdenum	1.90	ug/L	i		6020	0.28	2.00	1.00	3/27/2014	00:43
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/27/2014	00:43
Sodium	6720	ug/L			6010B	29	500	1.00	3/22/2014	01:07:43
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/27/2014	00:43

Comments:

Dissolved Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-006 **Client ID:** GAIN-HG-34S-031914

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204591 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	470	ug/L			6010B	11	100	1.00	3/22/2014	01:12:37
Antimony	0.250	ug/L	i		6020	0.160	1.0	1.00	3/27/2014	00:49
Arsenic	0.53	ug/L	i		6020	0.42	1.0	1.00	3/27/2014	00:49
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/27/2014	00:49
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/27/2014	00:49
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/27/2014	00:49
Iron	5.4	ug/L	I		6010B	2.5	100	1.00	3/22/2014	01:12:37
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/27/2014	00:49
Manganese	0.3	ug/L	i		6020	0.1	2.0	1.00	3/27/2014	00:49
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	17:17:22
Molybdenum	8.00	ug/L			6020	0.28	2.00	1.00	3/27/2014	00:49
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/27/2014	00:49
Sodium	11000	ug/L			6010B	29	500	1.00	3/22/2014	01:12:37
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/27/2014	00:49

Comments:

Dissolved Metals

- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-007 **Client ID:** GAIN-HG-22D-031914

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204591 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	120	ug/L			6010B	11	100	1.00	3/22/2014	01:17:29
Antimony	0.380	ug/L	i		6020	0.160	1.0	1.00	3/28/2014	14:23
Arsenic	0.62	ug/L	i		6020	0.42	1.0	1.00	3/28/2014	14:23
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/28/2014	14:23
Cadmium	0.570	ug/L			6020	0.090	0.400	1.00	3/28/2014	14:23
Chromium	0.55	ug/L	i		6020	0.18	1.0	1.00	3/28/2014	14:23
Iron	340	ug/L			6010B	2.5	100	1.00	3/22/2014	01:17:29
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/28/2014	14:23
Manganese	11	ug/L			6020	0.1	2.0	1.00	3/28/2014	14:23
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	17:18:29
Molybdenum	1.80	ug/L	i		6020	0.28	2.00	1.00	3/28/2014	14:23
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/28/2014	14:23
Sodium	2740	ug/L			6010B	29	500	1.00	3/22/2014	01:17:29
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/28/2014	14:23

Comments:

Dissolved Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: High Purity STDs

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
ICV									
	Aluminum	50100.00	50000.0	100	90.0 - 110.0	6010B	3/21/2014	18:01	032114A1
	Iron	39200.0	40000.0	98	90.0 - 110.0	6010B	3/21/2014	18:01	032114A1
	Sodium	20600.00	20000.0	103	90.0 - 110.0	6010B	3/21/2014	18:01	032114A1
CCV									
	Aluminum	4980.00	5000.0	100	90.0 - 110.0	6010B	3/21/2014	18:35	032114A1
	Iron	5080.0	5000.0	102	90.0 - 110.0	6010B	3/21/2014	18:35	032114A1
	Sodium	25100.00	25000.0	100	90.0 - 110.0	6010B	3/21/2014	18:35	032114A1
CCV									
	Aluminum	4900.00	5000.0	98	90.0 - 110.0	6010B	3/21/2014	19:42	032114A1
	Iron	4980.0	5000.0	100	90.0 - 110.0	6010B	3/21/2014	19:42	032114A1
	Sodium	25200.00	25000.0	101	90.0 - 110.0	6010B	3/21/2014	19:42	032114A1
CCV									
	Aluminum	4890.00	5000.0	98	90.0 - 110.0	6010B	3/21/2014	20:38	032114A1
	Iron	4980.0	5000.0	100	90.0 - 110.0	6010B	3/21/2014	20:38	032114A1
	Sodium	25200.00	25000.0	101	90.0 - 110.0	6010B	3/21/2014	20:38	032114A1
CCV									
	Aluminum	5010.00	5000.0	100	90.0 - 110.0	6010B	3/21/2014	21:30	032114A1
	Iron	5060.0	5000.0	101	90.0 - 110.0	6010B	3/21/2014	21:30	032114A1
	Sodium	25300.00	25000.0	101	90.0 - 110.0	6010B	3/21/2014	21:30	032114A1
CCV									
	Aluminum	4890.00	5000.0	98	90.0 - 110.0	6010B	3/21/2014	22:18	032114A1
	Iron	4900.0	5000.0	98	90.0 - 110.0	6010B	3/21/2014	22:18	032114A1
	Sodium	25400.00	25000.0	102	90.0 - 110.0	6010B	3/21/2014	22:18	032114A1
CCV									
	Aluminum	4900.00	5000.0	98	90.0 - 110.0	6010B	3/21/2014	23:11	032114A1
	Iron	4930.0	5000.0	99	90.0 - 110.0	6010B	3/21/2014	23:11	032114A1
	Sodium	25400.00	25000.0	102	90.0 - 110.0	6010B	3/21/2014	23:11	032114A1

Dissolved Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: High Purity STDs

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
CCV									
	Aluminum	4930.00	5000.0	99	90.0 - 110.0	6010B	3/21/2014	23:59	032114A1
	Iron	4950.0	5000.0	99	90.0 - 110.0	6010B	3/21/2014	23:59	032114A1
	Sodium	25400.00	25000.0	102	90.0 - 110.0	6010B	3/21/2014	23:59	032114A1
CCV									
	Aluminum	4960.00	5000.0	99	90.0 - 110.0	6010B	3/22/2014	00:49	032114A1
	Iron	4990.0	5000.0	100	90.0 - 110.0	6010B	3/22/2014	00:49	032114A1
	Sodium	25400.00	25000.0	102	90.0 - 110.0	6010B	3/22/2014	00:49	032114A1
CCV									
	Aluminum	4980.00	5000.0	100	90.0 - 110.0	6010B	3/22/2014	01:37	032114A1
	Iron	4990.0	5000.0	100	90.0 - 110.0	6010B	3/22/2014	01:37	032114A1
	Sodium	25600.00	25000.0	102	90.0 - 110.0	6010B	3/22/2014	01:37	032114A1
ICV									
	Mercury	4.96	5.00	99	90.0 - 110.0	7470A	3/24/2014	16:54	032414B
CCV-1									
	Mercury	5.00	5.00	100	80.0 - 120.0	7470A	3/24/2014	17:12	032414B
CCV-2									
	Mercury	5.00	5.00	100	80.0 - 120.0	7470A	3/24/2014	17:30	032414B
CCV-3									
	Mercury	4.99	5.00	100	80.0 - 120.0	7470A	3/24/2014	17:45	032414B

Dissolved Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: High Purity Standards

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
ICV									
	Antimony	49.4	50.0	99	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Arsenic	51.2	50.0	102	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Beryllium	20.0	20.0	100	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Cadmium	23.8	25.0	95	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Chromium	48.8	50.0	98	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Lead	49.7	50.0	99	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Manganese	49.4	50.0	99	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Molybdenum	49.6	50.0	99	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Selenium	49.1	50.0	98	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Thallium	48.9	50.0	98	90.0 - 110.0	6020	3/26/2014	23:08	032614B
CCV-1									
	Antimony	50.2	50.0	100	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Arsenic	51.2	50.0	102	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Beryllium	24.6	25.0	98	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Cadmium	19.5	20.0	98	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Chromium	49.5	50.0	99	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Lead	26.1	25.0	104	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Manganese	101.0	100.0	101	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Molybdenum	103.0	100.0	103	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Selenium	101.0	100.0	101	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Thallium	10.3	10.0	103	90.0 - 110.0	6020	3/26/2014	23:33	032614B
CCV-2									
	Antimony	49.2	50.0	98	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Arsenic	51.2	50.0	102	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Beryllium	25.9	25.0	104	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Cadmium	19.1	20.0	96	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Chromium	48.8	50.0	98	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Lead	26.0	25.0	104	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Manganese	101.0	100.0	101	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Molybdenum	99.9	100.0	100	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Selenium	101.0	100.0	101	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Thallium	10.1	10.0	101	90.0 - 110.0	6020	3/27/2014	00:33	032614B

Dissolved Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: High Purity Standards

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
CCV-3									
	Antimony	48.7	50.0	97	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Arsenic	52.3	50.0	105	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Beryllium	24.3	25.0	97	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Cadmium	19.3	20.0	96	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Chromium	49.7	50.0	99	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Lead	26.1	25.0	104	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Manganese	101.0	100.0	101	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Molybdenum	100.0	100.0	100	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Selenium	103.0	100.0	103	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Thallium	10.3	10.0	103	90.0 - 110.0	6020	3/27/2014	01:34	032614B
CCV-4									
	Antimony	48.0	50.0	96	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Arsenic	49.8	50.0	100	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Beryllium	24.2	25.0	97	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Cadmium	18.8	20.0	94	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Chromium	47.5	50.0	95	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Lead	25.4	25.0	102	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Manganese	98.4	100.0	98	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Molybdenum	97.3	100.0	97	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Selenium	99.4	100.0	99	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Thallium	10.1	10.0	101	90.0 - 110.0	6020	3/27/2014	01:54	032614B
ICV									
	Antimony	50.4	50.0	101	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Arsenic	50.5	50.0	101	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Beryllium	18.7	20.0	94	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Cadmium	25.4	25.0	102	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Chromium	50.2	50.0	100	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Lead	48.3	50.0	97	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Manganese	49.7	50.0	99	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Molybdenum	50.9	50.0	102	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Selenium	50.4	50.0	101	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Thallium	48.7	50.0	97	90.0 - 110.0	6020	3/28/2014	13:37	032814A

Dissolved Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: High Purity Standards

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
CCV-1									
	Antimony	50.5	50.0	101	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Arsenic	50.7	50.0	101	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Beryllium	24.1	25.0	96	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Cadmium	21.1	20.0	106	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Chromium	50.6	50.0	101	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Lead	24.8	25.0	99	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Manganese	101.0	100.0	101	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Molybdenum	104.0	100.0	104	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Selenium	101.0	100.0	101	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Thallium	10.3	10.0	103	90.0 - 110.0	6020	3/28/2014	14:02	032814A
CCV-2									
	Antimony	51.5	50.0	103	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Arsenic	50.0	50.0	100	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Beryllium	25.5	25.0	102	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Cadmium	20.8	20.0	104	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Chromium	50.8	50.0	102	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Lead	25.3	25.0	101	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Manganese	102.0	100.0	102	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Molybdenum	101.0	100.0	101	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Selenium	101.0	100.0	101	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Thallium	10.3	10.0	103	90.0 - 110.0	6020	3/28/2014	15:03	032814A
CCV-3									
	Antimony	50.3	50.0	101	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Arsenic	51.4	50.0	103	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Beryllium	25.0	25.0	100	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Cadmium	20.6	20.0	103	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Chromium	50.9	50.0	102	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Lead	25.3	25.0	101	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Manganese	102.0	100.0	102	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Molybdenum	100.0	100.0	100	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Selenium	102.0	100.0	102	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Thallium	10.4	10.0	104	90.0 - 110.0	6020	3/28/2014	15:38	032814A

Dissolved Metals
- 2b -
CRDL STANDARD FOR AA & ICP

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No:** **SAS No.:**

AA CRDL Standard Source:

ICP CRDL Standard Source: High Purity STDs

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Advisory Limits (%R)	Method	Analysis Date	Analysis Time	Run Number
MRL									
	Aluminum	68.60	100.0	69	50 - 150	6010B	3/21/2014	18:15	032114A1
	Iron	106.0	100.0	106	50 - 150	6010B	3/21/2014	18:15	032114A1
	Sodium	546.00	500.0	109	50 - 150	6010B	3/21/2014	18:15	032114A1
MRL 0.1									
	Mercury	0.10	0.10	100	50 - 150	7470A	3/24/2014	16:57	032414B
MRL									
	Antimony	1.13	1.00	113	50 - 150	6020	3/26/2014	23:18	032614B
	Arsenic	1.07	1.00	107	50 - 150	6020	3/26/2014	23:18	032614B
	Beryllium	0.48	0.50	96	50 - 150	6020	3/26/2014	23:18	032614B
	Cadmium	0.38	0.40	95	50 - 150	6020	3/26/2014	23:18	032614B
	Chromium	1.12	1.00	112	50 - 150	6020	3/26/2014	23:18	032614B
	Lead	0.27	0.50	54	50 - 150	6020	3/26/2014	23:18	032614B
	Manganese	2.05	2.00	102	50 - 150	6020	3/26/2014	23:18	032614B
	Molybdenum	1.98	2.00	99	50 - 150	6020	3/26/2014	23:18	032614B
	Selenium	1.73	2.00	86	50 - 150	6020	3/26/2014	23:18	032614B
	Thallium	0.20	0.20	100	50 - 150	6020	3/26/2014	23:18	032614B
MRL									
	Antimony	1.22	1.00	122	50 - 150	6020	3/28/2014	13:47	032814A
	Arsenic	1.24	1.00	124	50 - 150	6020	3/28/2014	13:47	032814A
	Beryllium	0.50	0.50	100	50 - 150	6020	3/28/2014	13:47	032814A
	Cadmium	0.44	0.40	110	50 - 150	6020	3/28/2014	13:47	032814A
	Chromium	0.89	1.00	89	50 - 150	6020	3/28/2014	13:47	032814A
	Lead	0.52	0.50	104	50 - 150	6020	3/28/2014	13:47	032814A
	Manganese	2.04	2.00	102	50 - 150	6020	3/28/2014	13:47	032814A
	Molybdenum	2.04	2.00	102	50 - 150	6020	3/28/2014	13:47	032814A
	Selenium	1.88	2.00	94	50 - 150	6020	3/28/2014	13:47	032814A
	Thallium	0.20	0.20	100	50 - 150	6020	3/28/2014	13:47	032814A

Dissolved Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
ICB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	18:05	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	18:05	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	18:05	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	18:39	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	18:39	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	18:39	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	19:46	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	19:46	032114A1
	Sodium	35.600	+/-500.000	I	29.000	500.000	6010B	3/21/2014	19:46	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	20:42	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	20:42	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	20:42	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	21:34	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	21:34	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	21:34	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	22:22	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	22:22	032114A1
	Sodium	35.000	+/-500.000	I	29.000	500.000	6010B	3/21/2014	22:22	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	23:14	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	23:14	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	23:14	032114A1

Dissolved Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/22/2014	00:02	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/22/2014	00:02	032114A1
	Sodium	29.900	+/-500.000	I	29.000	500.000	6010B	3/22/2014	00:02	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/22/2014	00:53	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/22/2014	00:53	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/22/2014	00:53	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/22/2014	01:41	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/22/2014	01:41	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/22/2014	01:41	032114A1
ICB										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	16:56	032414B
CCB-1										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	17:15	032414B
CCB-2										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	17:32	032414B
CCB-3										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	17:47	032414B

Dissolved Metals
- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
ICB										
	Antimony	0.54	+/-1.00	i	0.16	1.00	6020	3/26/2014	23:13	032614B
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/26/2014	23:13	032614B
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/26/2014	23:13	032614B
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/26/2014	23:13	032614B
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/26/2014	23:13	032614B
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/26/2014	23:13	032614B
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/26/2014	23:13	032614B
	Molybdenum	0.36	+/-2.00	i	0.28	2.00	6020	3/26/2014	23:13	032614B
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/26/2014	23:13	032614B
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/26/2014	23:13	032614B
CCB-1										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/26/2014	23:38	032614B
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/26/2014	23:38	032614B
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/26/2014	23:38	032614B
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/26/2014	23:38	032614B
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/26/2014	23:38	032614B
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/26/2014	23:38	032614B
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/26/2014	23:38	032614B
	Molybdenum	0.59	+/-2.00	i	0.28	2.00	6020	3/26/2014	23:38	032614B
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/26/2014	23:38	032614B
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/26/2014	23:38	032614B
CCB-2										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/27/2014	00:38	032614B
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/27/2014	00:38	032614B
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/27/2014	00:38	032614B
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/27/2014	00:38	032614B
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/27/2014	00:38	032614B
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/27/2014	00:38	032614B
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/27/2014	00:38	032614B
	Molybdenum	0.28	+/-2.00	U	0.28	2.00	6020	3/27/2014	00:38	032614B
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/27/2014	00:38	032614B
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/27/2014	00:38	032614B

Dissolved Metals
- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
CCB-3										
	Antimony	0.19	+/-1.00	i	0.16	1.00	6020	3/27/2014	01:39	032614B
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/27/2014	01:39	032614B
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/27/2014	01:39	032614B
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/27/2014	01:39	032614B
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/27/2014	01:39	032614B
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/27/2014	01:39	032614B
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/27/2014	01:39	032614B
	Molybdenum	0.30	+/-2.00	i	0.28	2.00	6020	3/27/2014	01:39	032614B
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/27/2014	01:39	032614B
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/27/2014	01:39	032614B
CCB-4										
	Antimony	0.17	+/-1.00	i	0.16	1.00	6020	3/27/2014	01:59	032614B
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/27/2014	01:59	032614B
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/27/2014	01:59	032614B
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/27/2014	01:59	032614B
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/27/2014	01:59	032614B
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/27/2014	01:59	032614B
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/27/2014	01:59	032614B
	Molybdenum	0.28	+/-2.00	i	0.28	2.00	6020	3/27/2014	01:59	032614B
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/27/2014	01:59	032614B
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/27/2014	01:59	032614B
ICB										
	Antimony	0.56	+/-1.00	i	0.16	1.00	6020	3/28/2014	13:42	032814A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/28/2014	13:42	032814A
	Beryllium	0.03	+/-0.50	i	0.03	0.50	6020	3/28/2014	13:42	032814A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/28/2014	13:42	032814A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/28/2014	13:42	032814A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/28/2014	13:42	032814A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/28/2014	13:42	032814A
	Molybdenum	0.35	+/-2.00	i	0.28	2.00	6020	3/28/2014	13:42	032814A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/28/2014	13:42	032814A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/28/2014	13:42	032814A

Dissolved Metals
- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
CCB-1										
	Antimony	0.21	+/-1.00	i	0.16	1.00	6020	3/28/2014	14:08	032814A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/28/2014	14:08	032814A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/28/2014	14:08	032814A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/28/2014	14:08	032814A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/28/2014	14:08	032814A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/28/2014	14:08	032814A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/28/2014	14:08	032814A
	Molybdenum	0.65	+/-2.00	i	0.28	2.00	6020	3/28/2014	14:08	032814A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/28/2014	14:08	032814A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/28/2014	14:08	032814A
CCB-2										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/28/2014	15:08	032814A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/28/2014	15:08	032814A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/28/2014	15:08	032814A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/28/2014	15:08	032814A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/28/2014	15:08	032814A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/28/2014	15:08	032814A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/28/2014	15:08	032814A
	Molybdenum	0.35	+/-2.00	i	0.28	2.00	6020	3/28/2014	15:08	032814A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/28/2014	15:08	032814A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/28/2014	15:08	032814A
CCB-3										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/28/2014	15:43	032814A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/28/2014	15:43	032814A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/28/2014	15:43	032814A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/28/2014	15:43	032814A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/28/2014	15:43	032814A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/28/2014	15:43	032814A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/28/2014	15:43	032814A
	Molybdenum	0.52	+/-2.00	i	0.28	2.00	6020	3/28/2014	15:43	032814A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/28/2014	15:43	032814A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/28/2014	15:43	032814A

Dissolved Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result (ug/L)	Conc Qual	Q	Acceptance Limit	MDL	MRL	Method	Analysis Date	Analysis Time	Run
MB-02113-02			**WATER**								
	Mercury	0.012	U		+/-0.012	0.012	0.100	7470A	3/24/2014	16:59	032414B
MB-02130-02			**WATER**								
	Aluminum	79.700	I		+/-11.000	11.000	100.000	6010B	3/22/2014	00:17	032114A1
	Iron	16.000	I		+/-2.500	2.500	100.000	6010B	3/22/2014	00:17	032114A1
	Sodium	29.000	U		+/-29.000	29.000	500.000	6010B	3/22/2014	00:17	032114A1
MB-02133-04			**WATER**								
	Antimony	0.250	i		+/-0.160	0.160	1.000	6020	3/26/2014	23:43	032614B
	Arsenic	0.420	U		+/-0.420	0.420	1.000	6020	3/26/2014	23:43	032614B
	Beryllium	0.032	U		+/-0.032	0.032	0.500	6020	3/26/2014	23:43	032614B
	Cadmium	0.091	U		+/-0.091	0.091	0.400	6020	3/26/2014	23:43	032614B
	Chromium	0.200	i		+/-0.180	0.180	1.000	6020	3/26/2014	23:43	032614B
	Lead	0.120	U		+/-0.120	0.120	0.500	6020	3/26/2014	23:43	032614B
	Manganese	0.120	U		+/-0.120	0.120	2.000	6020	3/26/2014	23:43	032614B
	Molybdenum	0.390	i		+/-0.280	0.280	2.000	6020	3/26/2014	23:43	032614B
	Selenium	1.100	U		+/-1.100	1.100	2.000	6020	3/26/2014	23:43	032614B
	Thallium	0.050	U		+/-0.050	0.050	0.200	6020	3/26/2014	23:43	032614B
MB-02258-02			**WATER**								
	Antimony	0.160	U		+/-0.160	0.160	1.000	6020	3/28/2014	14:13	032814A
	Arsenic	0.420	U		+/-0.420	0.420	1.000	6020	3/28/2014	14:13	032814A
	Beryllium	0.032	U		+/-0.032	0.032	0.500	6020	3/28/2014	14:13	032814A
	Cadmium	0.091	U		+/-0.091	0.091	0.400	6020	3/28/2014	14:13	032814A
	Chromium	0.180	U		+/-0.180	0.180	1.000	6020	3/28/2014	14:13	032814A
	Lead	0.120	U		+/-0.120	0.120	0.500	6020	3/28/2014	14:13	032814A
	Manganese	0.380	i		+/-0.120	0.120	2.000	6020	3/28/2014	14:13	032814A
	Molybdenum	0.310	i		+/-0.280	0.280	2.000	6020	3/28/2014	14:13	032814A
	Selenium	1.100	U		+/-1.100	1.100	2.000	6020	3/28/2014	14:13	032814A
	Thallium	0.050	U		+/-0.050	0.050	0.200	6020	3/28/2014	14:13	032814A

Dissolved Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

ICS Source: **Instrument ID:** PE Optima ICP

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Method	Analysis Date	Analysis Time	Run Number
ICSA									
	Aluminum	753000	750000	100	80 - 120%	6010B	3/21/2014	18:19	032114A1
	Iron	668000	750000	89	80 - 120%	6010B	3/21/2014	18:19	032114A1
	Sodium	34			0.0 to 0.0	6010B	3/21/2014	18:19	032114A1
ICSAB									
	Aluminum	766000	752000	102	80 - 120%	6010B	3/21/2014	18:27	032114A1
	Iron	677000	752000	90	80 - 120%	6010B	3/21/2014	18:27	032114A1
	Sodium	11200	10000	112	80 - 120%	6010B	3/21/2014	18:27	032114A1
ICSA									
	Aluminum	757000	750000	101	80 - 120%	6010B	3/22/2014	01:21	032114A1
	Iron	667000	750000	89	80 - 120%	6010B	3/22/2014	01:21	032114A1
	Sodium	28			0.0 to 0.0	6010B	3/22/2014	01:21	032114A1
ICSAB									
	Aluminum	770000	752000	102	80 - 120%	6010B	3/22/2014	01:29	032114A1
	Iron	678000	752000	90	80 - 120%	6010B	3/22/2014	01:29	032114A1
	Sodium	11400	10000	114	80 - 120%	6010B	3/22/2014	01:29	032114A1
ICSA									
	Antimony	0.2			-2.0 to 2.0	6020	3/26/2014	23:23	032614B
	Arsenic	-0.5			-2.0 to 2.0	6020	3/26/2014	23:23	032614B
	Beryllium	0.024			-1.000 to 1.000	6020	3/26/2014	23:23	032614B
	Cadmium	0.1			-0.8 to 0.8	6020	3/26/2014	23:23	032614B
	Chromium	1.1			-2.0 to 2.0	6020	3/26/2014	23:23	032614B
	Lead	-0.2			-1.0 to 2.0	6020	3/26/2014	23:23	032614B
	Manganese	0.4			-4.0 to 4.0	6020	3/26/2014	23:23	032614B
	Molybdenum	1100.0	1000.0	110	80 - 120%	6020	3/26/2014	23:23	032614B
	Selenium	0.1			-4.0 to 4.0	6020	3/26/2014	23:23	032614B
	Thallium	0.0			-0.4 to 0.4	6020	3/26/2014	23:23	032614B

Dissolved Metals
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INTERFERENCE CHECK SAMPLE

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

ICS Source: **Instrument ID:** ICP-MS

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Method	Analysis Date	Analysis Time	Run Number
ICSAB									
	Antimony	21.0	20.0	105	80 - 120%	6020	3/26/2014	23:28	032614B
	Arsenic	21.7	20.0	108	80 - 120%	6020	3/26/2014	23:28	032614B
	Beryllium	9.630	10.000	96	80 - 120%	6020	3/26/2014	23:28	032614B
	Cadmium	7.6	8.0	95	80 - 120%	6020	3/26/2014	23:28	032614B
	Chromium	22.1	20.0	110	80 - 120%	6020	3/26/2014	23:28	032614B
	Lead	10.0	10.0	100	80 - 120%	6020	3/26/2014	23:28	032614B
	Manganese	41.2	40.0	103	80 - 120%	6020	3/26/2014	23:28	032614B
	Molybdenum	1150.0	1040.0	111	80 - 120%	6020	3/26/2014	23:28	032614B
	Selenium	41.1	40.0	103	80 - 120%	6020	3/26/2014	23:28	032614B
	Thallium	4.0	4.0	100	80 - 120%	6020	3/26/2014	23:28	032614B
ICSA									
	Antimony	0.1			-2.0 to 2.0	6020	3/28/2014	13:52	032814A
	Arsenic	0.5			-2.0 to 2.0	6020	3/28/2014	13:52	032814A
	Beryllium	0.025			-1.000 to 1.000	6020	3/28/2014	13:52	032814A
	Cadmium	0.3			-0.8 to 0.8	6020	3/28/2014	13:52	032814A
	Chromium	0.7			-2.0 to 2.0	6020	3/28/2014	13:52	032814A
	Lead	0.1			-1.0 to 2.0	6020	3/28/2014	13:52	032814A
	Manganese	0.3			-4.0 to 4.0	6020	3/28/2014	13:52	032814A
	Molybdenum	1050.0	1000.0	105	80 - 120%	6020	3/28/2014	13:52	032814A
	Selenium	1.0			-4.0 to 4.0	6020	3/28/2014	13:52	032814A
	Thallium	0.0			-0.4 to 0.4	6020	3/28/2014	13:52	032814A
ICSAB									
	Antimony	20.9	20.0	104	80 - 120%	6020	3/28/2014	13:57	032814A
	Arsenic	20.7	20.0	104	80 - 120%	6020	3/28/2014	13:57	032814A
	Beryllium	9.240	10.000	92	80 - 120%	6020	3/28/2014	13:57	032814A
	Cadmium	8.1	8.0	101	80 - 120%	6020	3/28/2014	13:57	032814A
	Chromium	21.7	20.0	108	80 - 120%	6020	3/28/2014	13:57	032814A
	Lead	9.9	10.0	99	80 - 120%	6020	3/28/2014	13:57	032814A
	Manganese	40.8	40.0	102	80 - 120%	6020	3/28/2014	13:57	032814A
	Molybdenum	1100.0	1040.0	106	80 - 120%	6020	3/28/2014	13:57	032814A
	Selenium	41.9	40.0	105	80 - 120%	6020	3/28/2014	13:57	032814A
	Thallium	4.0	4.0	100	80 - 120%	6020	3/28/2014	13:57	032814A

Dissolved Metals

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INTERFERENCE CHECK SAMPLE

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

ICS Source: **Instrument ID:** ICP-MS

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Method	Analysis Date	Analysis Time	Run Number

Dissolved Metals
- 5a -
MATRIX SPIKE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-001 **Client ID:** GAIN-M-25A-031814S

Percent Solids for Sample: 0.00 **Spiked ID:** J1402025-001S **Percent Solids for Spike Sample:** 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Mercury	ug/L	75 - 125	1.23		0.01	U	1.25	98		7470A

Dissolved Metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

Client: Beazer East, Inc. Level: LOW SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Matrix: WATER Sample ID: J1402025-001 Client ID: GAIN-M-25A-031814SD

Percent Solids for Sample: 0.00 Spiked ID: J1402025-001SD Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Mercury	ug/L	75 - 125	1.24		0.01	U	1.25	98		7470A

Dissolved Metals
- 5a -
MATRIX SPIKE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-002 **Client ID:** GAIN-M-36B-031814S

Percent Solids for Sample: 0.00 **Spiked ID:** J1402025-002S **Percent Solids for Spike Sample:** 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Aluminum	ug/L	75 - 125	5230.000		110.000		5000	102		6010B
Iron	ug/L	75 - 125	5800.000		753.000		5000	101		6010B
Sodium	ug/L	75 - 125	32200.000		6770.000		25000	102		6010B

Dissolved Metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-002 **Client ID:** GAIN-M-36B-031814SD

Percent Solids for Sample: 0.00 **Spiked ID:** J1402025-002SD **Percent Solids for Spike Sample:** 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Aluminum	ug/L	75 - 125	5100.000		110.000		5000	100		6010B
Iron	ug/L	75 - 125	5720.000		753.000		5000	99		6010B
Sodium	ug/L	75 - 125	32200.000		6770.000		25000	102		6010B

Dissolved Metals
- 5a -
MATRIX SPIKE SUMMARY

Client: Beazer East, Inc. Level: LOW SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Matrix: WATER Sample ID: J1402025-007 Client ID: GAIN-HG-22D-031914S

Percent Solids for Sample: 0.00 Spiked ID: J1402025-007S Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Antimony	ug/L	75 - 125	51.60		0.38		50.0	102		6020
Arsenic	ug/L	75 - 125	50.80		0.62		50.0	100		6020
Beryllium	ug/L	75 - 125	23.3		0.0	U	25.0	93		6020
Cadmium	ug/L	75 - 125	20.6		0.6		20.0	100		6020
Chromium	ug/L	75 - 125	52.40		0.55		50.0	104		6020
Lead	ug/L	75 - 125	24.60		0.12	U	25.0	98		6020
Manganese	ug/L	75 - 125	110.0		11.0		100.0	99		6020
Molybdenum	ug/L	75 - 125	106.00		1.82		100.0	104		6020
Selenium	ug/L	75 - 125	92.6		1.1	U	100.0	93		6020
Thallium	ug/L	75 - 125	10.10		0.05	U	10.0	101		6020

Dissolved Metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-007 **Client ID:** GAIN-HG-22D-031914SD

Percent Solids for Sample: 0.00 **Spiked ID:** J1402025-007SD **Percent Solids for Spike Sample:** 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Antimony	ug/L	75 - 125	52.10		0.38		50.0	103		6020
Arsenic	ug/L	75 - 125	51.40		0.62		50.0	102		6020
Beryllium	ug/L	75 - 125	23.5		0.0	U	25.0	94		6020
Cadmium	ug/L	75 - 125	20.9		0.6		20.0	102		6020
Chromium	ug/L	75 - 125	52.90		0.55		50.0	105		6020
Lead	ug/L	75 - 125	24.90		0.12	U	25.0	100		6020
Manganese	ug/L	75 - 125	120.0		11.0		100.0	109		6020
Molybdenum	ug/L	75 - 125	106.00		1.82		100.0	104		6020
Selenium	ug/L	75 - 125	94.4		1.1	U	100.0	94		6020
Thallium	ug/L	75 - 125	10.20		0.05	U	10.0	102		6020

Dissolved Metals

- 5b -

POST DIGEST SPIKE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-M-25A-031814A

Sample ID: J1402025-001 **Spiked ID:** J1402025-001A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Mercury	ug/L	75 - 125	4.94		0.01	U	5.00	99		7470A

Dissolved Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-M-36B-031814A

Sample ID: J1402025-002 **Spiked ID:** J1402025-002A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Aluminum	ug/L	75 - 125	5270.000		110.000		5000	103		6010B
Iron	ug/L	75 - 125	5800.000		753.000		5000	101		6010B
Sodium	ug/L	75 - 125	32400.000		6770.000		25000	103		6010B

Dissolved Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-HG-22D-031914A

Sample ID: J1402025-007 **Spiked ID:** J1402025-007A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Antimony	ug/L	75 - 125	51.00		0.38		50.0	101		6020
Arsenic	ug/L	75 - 125	50.70		0.62		50.0	100		6020
Beryllium	ug/L	75 - 125	24.00		0.03	U	25.0	96		6020
Cadmium	ug/L	75 - 125	21.20		0.57		20.0	103		6020
Chromium	ug/L	75 - 125	52.00		0.55		50.0	103		6020
Lead	ug/L	75 - 125	24.80		0.12	U	25.0	99		6020
Manganese	ug/L	75 - 125	114.00		11.20		100.0	103		6020
Molybdenum	ug/L	75 - 125	105.00		1.82		100.0	103		6020
Selenium	ug/L	75 - 125	97.40		1.10	U	100.0	97		6020
Thallium	ug/L	75 - 125	10.30		0.05	U	10.0	103		6020

Dissolved Metals
- 6 -
DUPLICATE SAMPLE SUMMARY

Client: Beazer East, Inc. Level: LOW SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Matrix: WATER Sample ID: J1402025-007S Client ID: GAIN-HG-22D-031914SD

Percent Solids for Sample: 0.00 Duplicate ID: J1402025-007SD Percent Solids for Duplicate: 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	Method
Antimony	ug/L	0 - 30	51.60		52.10		1		6020
Arsenic	ug/L	0 - 30	50.80		51.40		1		6020
Beryllium	ug/L	0 - 30	23.3		23.5		1		6020
Cadmium	ug/L	0 - 30	20.6		20.9		1		6020
Chromium	ug/L	0 - 30	52.40		52.90		1		6020
Lead	ug/L	0 - 30	24.60		24.90		1		6020
Manganese	ug/L	0 - 30	110.0		120.0		9		6020
Molybdenum	ug/L	0 - 30	106.00		106.00		0		6020
Selenium	ug/L	0 - 30	92.6		94.4		2		6020
Thallium	ug/L	0 - 30	10.10		10.20		1		6020

Dissolved Metals
- 6 -
DUPLICATE SAMPLE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-001S **Client ID:** GAIN-M-25A-031814SD

Percent Solids for Sample: 0.00 **Duplicate ID:** J1402025-001SD **Percent Solids for Duplicate:** 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	Method
Mercury	ug/L	0 - 30	1.23		1.24		1		7470A

Dissolved Metals
- 6 -
DUPLICATE SAMPLE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-002S **Client ID:** GAIN-M-36B-031814SD

Percent Solids for Sample: 0.00 **Duplicate ID:** J1402025-002SD **Percent Solids for Duplicate:** 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	Method
Aluminum	ug/L	0 - 30	5230.000		5100.000		3		6010B
Iron	ug/L	0 - 30	5800.000		5720.000		1		6010B
Sodium	ug/L	0 - 30	32200.000		32200.000		0		6010B

Dissolved Metals

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Aqueous LCS Source: Inorganic Ventures **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	Method
LCS-02113-01								
	Mercury	ug/L	1.25	1.25		100	80.0 - 120.0	7470A

Dissolved Metals
- 7 -
LABORATORY CONTROL SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Aqueous LCS Source: High Purity STDs **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	Method
LCS-02130-01								
	Aluminum	ug/L	5000	5210		104	80.0 - 120.0	6010B
	Iron	ug/L	5000	5050		101	80.0 - 120.0	6010B
	Sodium	ug/L	25000	25600		102	80.0 - 120.0	6010B

Dissolved Metals
- 7 -
LABORATORY CONTROL SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Aqueous LCS Source: Inorganic Ventures **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	Method
LCS-02133-03								
	Antimony	ug/L	50.0	52.4		105	80.0 - 120.0	6020
	Arsenic	ug/L	50.0	52.1		104	80.0 - 120.0	6020
	Beryllium	ug/L	25.0	25.1		100	80.0 - 120.0	6020
	Cadmium	ug/L	20.0	19.8		99	80.0 - 120.0	6020
	Chromium	ug/L	50.0	50.9		102	80.0 - 120.0	6020
	Lead	ug/L	25.0	27.1		108	80.0 - 120.0	6020
	Manganese	ug/L	100.0	104.0		104	80.0 - 120.0	6020
	Molybdenum	ug/L	100.0	103.0		103	80.0 - 120.0	6020
	Selenium	ug/L	100.0	100.0		100	80.0 - 120.0	6020
	Thallium	ug/L	10.0	10.5		105	80.0 - 120.0	6020

Dissolved Metals

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Aqueous LCS Source: Inorganic Ventures **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	Method
LCS-02258-01								
	Antimony	ug/L	50.0	52.3		105	80.0 - 120.0	6020
	Arsenic	ug/L	50.0	51.2		102	80.0 - 120.0	6020
	Beryllium	ug/L	25.0	24.2		97	80.0 - 120.0	6020
	Cadmium	ug/L	20.0	20.7		104	80.0 - 120.0	6020
	Chromium	ug/L	50.0	52.3		105	80.0 - 120.0	6020
	Lead	ug/L	25.0	25.7		103	80.0 - 120.0	6020
	Manganese	ug/L	100.0	107.0		107	80.0 - 120.0	6020
	Molybdenum	ug/L	100.0	105.0		105	80.0 - 120.0	6020
	Selenium	ug/L	100.0	101.0		101	80.0 - 120.0	6020
	Thallium	ug/L	10.0	10.2		102	80.0 - 120.0	6020

Dissolved Metals

- 9 -

SERIAL DILUTION SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-HG-22D-031914L

Sample ID: J1402025-007 **Serial Dilution ID:** J1402025-007L

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	Method
Antimony	0.38		0.16	U	100.0		10.00 %	6020
Arsenic	0.623		0.420	U	100.0		10.00 %	6020
Beryllium	0.032	U	0.032	U			10.00 %	6020
Cadmium	0.570		0.730	i	28		10.00 %	6020
Chromium	0.547		0.180	U	100.0		10.00 %	6020
Lead	0.120	U	0.120	U			10.00 %	6020
Manganese	11.200		12.200		9		10.00 %	6020
Molybdenum	1.820		3.400	i	87		10.00 %	6020
Selenium	1.100	U	1.100	U			10.00 %	6020
Thallium	0.050	U	0.050	U			10.00 %	6020

Dissolved Metals

- 9 -

SERIAL DILUTION SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-M-25A-031814L

Sample ID: **J1402025-001** **Serial Dilution ID:** **J1402025-001L**

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	Method
Mercury	0.01	U	0.01	U			10.00 %	7470A

Dissolved Metals

- 9 -

SERIAL DILUTION SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-M-36B-031814L

Sample ID: J1402025-002 **Serial Dilution ID:** J1402025-002L

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	Method
Aluminum	110.000		134.000	I	21.8		10.00 %	6010B
Iron	753.000		826.000		9.7		10.00 %	6010B
Sodium	6772.000		6925.000		2.3		10.00 %	6010B

Dissolved Metals
- 10 -
METHOD DETECTION LIMITS

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Analyte	Wave- length (nm)	MDL ug/L	MRL ug/L
Cetac Hg Analyzer		**Date:**	1/11/2012
Mercury	253.70	0.012	0.100
ICP-MS		**Date:**	1/20/2012
Antimony	123	0.16	1.00
Arsenic	75	0.42	1.00
Beryllium	9	0.032	0.50
Cadmium	114	0.09	0.40
Chromium	52	0.18	1.00
Lead	208	0.12	0.50
Manganese	55	0.12	2.00
Molybdenum	98	0.28	2.00
Selenium	78	1.10	2.00
Thallium	205	0.050	0.20
PE Optima ICP		**Date:**	2/3/2012
Aluminum	308.215	11.00	100.00
Iron	273.955	2.50	100.00
Sodium	589.592	29.00	500.00

Dissolved Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Method:** CV

Case No.: **SAS No.:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	204565						
MB-02113-02	MB-02113-02	MB	WATER	3/20/14	40.0	40.0	
LCS-02113-01	LCS-02113-01	LCS	WATER	3/20/14	40.0	40.0	
J1402025-001	GAIN-M-25A-031814	SAM	WATER	3/20/14	40.0	40.0	
J1402025-001S	GAIN-M-25A-031814S	MS	WATER	3/20/14	40.0	40.0	
J1402025-001SD	GAIN-M-25A-031814SD	MSD	WATER	3/20/14	40.0	40.0	
J1402025-002	GAIN-M-36B-031814	SAM	WATER	3/20/14	40.0	40.0	
J1402025-003	GAIN-HG-24S-031814	SAM	WATER	3/20/14	40.0	40.0	
J1402025-004	GAIN-M-25B-031814	SAM	WATER	3/20/14	40.0	40.0	
J1402025-005	GAIN-HG-33S-031914	SAM	WATER	3/20/14	40.0	40.0	
J1402025-006	GAIN-HG-34S-031914	SAM	WATER	3/20/14	40.0	40.0	
J1402025-007	GAIN-HG-22D-031914	SAM	WATER	3/20/14	40.0	40.0	

Dissolved Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Beazer East, Inc.　　SDG No.: J1402025

Contract: OM-0450-14　　Lab Code: ALJCK　　Method: P

Case No.:　　SAS No.:

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	204591						
MB-02130-02	MB-02130-02	MB	WATER	3/21/14	50.0	50.0	
LCS-02130-01	LCS-02130-01	LCS	WATER	3/21/14	50.0	50.0	
J1402025-001	GAIN-M-25A-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-002	GAIN-M-36B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-002S	GAIN-M-36B-031814S	MS	WATER	3/21/14	50.0	50.0	
J1402025-002SD	GAIN-M-36B-031814SD	MSD	WATER	3/21/14	50.0	50.0	
J1402025-003	GAIN-HG-24S-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-004	GAIN-M-25B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-005	GAIN-HG-33S-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-006	GAIN-HG-34S-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-007	GAIN-HG-22D-031914	SAM	WATER	3/21/14	50.0	50.0	

Dissolved Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Beazer East, Inc.

SDG No.: J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK

Method: MS

Case No.: **SAS No.:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	204595						
MB-02133-04	MB-02133-04	MB	WATER	3/21/14	50.0	50.0	
LCS-02133-03	LCS-02133-03	LCS	WATER	3/21/14	50.0	50.0	
J1402025-001	GAIN-M-25A-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-002	GAIN-M-36B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-003	GAIN-HG-24S-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-004	GAIN-M-25B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-005	GAIN-HG-33S-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-006	GAIN-HG-34S-031914	SAM	WATER	3/21/14	50.0	50.0	

Dissolved Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Beazer East, Inc.

SDG No.: J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK

Method: MS

Case No.: **SAS No.:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	204900						
MB-02258-02	MB-02258-02	MB	WATER	3/26/14	50.0	50.0	
LCS-02258-01	LCS-02258-01	LCS	WATER	3/26/14	50.0	50.0	
J1402025-007	GAIN-HG-22D-031914	SAM	WATER	3/26/14	50.0	50.0	
J1402025-007S	GAIN-HG-22D-031914S	MS	WATER	3/26/14	50.0	50.0	
J1402025-007SD	GAIN-HG-22D-031914SD	MSD	WATER	3/26/14	50.0	50.0	

Dissolved Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIB BLANK	1.00	1741		X										X									X				
CALIB STD 1	1.00	1746		X										X									X				
CALIB STD 2	1.00	1751		X										X									X				
CALIB STD 3	1.00	1755		X										X									X				
CALIB STD 4	1.00	1758		X										X									X				
ICV	1.00	1801		X										X									X				
ICB	1.00	1805		X										X									X				
ZZZZZZ	1.00	1810																									
MRL	1.00	1815		X										X									X				
ICSA	1.00	1819		X										X									X				
ICSAB	1.00	1827		X										X									X				
CCV	1.00	1835		X										X									X				
CCB	1.00	1839		X										X									X				
ZZZZZZ	2.00	1844																									
ZZZZZZ	5.00	1852																									
ZZZZZZ	2.00	1857																									
ZZZZZZ	1.00	1905																									
ZZZZZZ	1.00	1910																									
ZZZZZZ	1.00	1914																									
ZZZZZZ	1.00	1923																									
ZZZZZZ	1.00	1928																									
ZZZZZZ	1.00	1933																									
ZZZZZZ	1.00	1938																									
CCV	1.00	1942		X										X									X				
CCB	1.00	1946		X										X									X				
ZZZZZZ	1.00	1951																									
ZZZZZZ	1.00	1955																									
ZZZZZZ	1.00	2000																									
ZZZZZZ	1.00	2005																									
ZZZZZZ	1.00	2010																									
ZZZZZZ	1.00	2015																									
ZZZZZZ	1.00	2019																									
ZZZZZZ	1.00	2024																									
ZZZZZZ	1.00	2029																									
ZZZZZZ	1.00	2034																									
CCV	1.00	2038		X										X									X				

Dissolved Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	2042		X										X									X				
ZZZZZZ	1.00	2047																									
ZZZZZZ	1.00	2052																									
ZZZZZZ	1.00	2057																									
ZZZZZZ	1.00	2102																									
ZZZZZZ	1.00	2106																									
ZZZZZZ	1.00	2109																									
ZZZZZZ	5.00	2113																									
ZZZZZZ	1.00	2117																									
ZZZZZZ	1.00	2121																									
ZZZZZZ	1.00	2126																									
CCV	1.00	2130		X										X									X				
CCB	1.00	2134		X										X									X				
ZZZZZZ	1.00	2138																									
ZZZZZZ	1.00	2142																									
ZZZZZZ	1.00	2146																									
ZZZZZZ	1.00	2149																									
ZZZZZZ	5.00	2153																									
ZZZZZZ	1.00	2157																									
ZZZZZZ	1.00	2201																									
ZZZZZZ	1.00	2206																									
ZZZZZZ	1.00	2210																									
ZZZZZZ	1.00	2214																									
CCV	1.00	2218		X										X									X				
CCB	1.00	2222		X										X									X				
ZZZZZZ	1.00	2227																									
ZZZZZZ	1.00	2232																									
ZZZZZZ	1.00	2236																									
ZZZZZZ	1.00	2239																									
ZZZZZZ	5.00	2243																									
ZZZZZZ	1.00	2247																									
ZZZZZZ	1.00	2251																									
ZZZZZZ	1.00	2256																									
ZZZZZZ	1.00	2301																									
ZZZZZZ	1.00	2306																									
CCV	1.00	2311		X										X									X				

Dissolved Metals

14

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	2314		X										X									X				
ZZZZZZ	1.00	2319																									
ZZZZZZ	1.00	2323																									
ZZZZZZ	1.00	2327																									
ZZZZZZ	1.00	2331																									
ZZZZZZ	1.00	2335																									
ZZZZZZ	5.00	2338																									
ZZZZZZ	1.00	2343																									
ZZZZZZ	1.00	2346																									
ZZZZZZ	1.00	2351																									
ZZZZZZ	1.00	2356																									
CCV	1.00	2359		X										X									X				
CCB	1.00	0002		X										X									X				
ZZZZZZ	1.00	0007																									
ZZZZZZ	1.00	0013																									
MB-02130-02	1.00	0017		X										X									X				
LCS-02130-01	1.00	0022		X										X									X				
GAIN-M-25A-031814	1.00	0025		X										X									X				
GAIN-M-36B-031814	1.00	0030		X										X									X				
GAIN-M-36B-031814S	1.00	0035		X										X									X				
GAIN-M-36B-031814SD	1.00	0038		X										X									X				
GAIN-M-36B-031814L	5.00	0041		X										X									X				
GAIN-M-36B-031814A	1.00	0046		X										X									X				
CCV	1.00	0049		X										X									X				
CCB	1.00	0053		X										X									X				
GAIN-HG-24S-031814	1.00	0057		X										X									X				
GAIN-M-25B-031814	1.00	0102		X										X									X				
GAIN-HG-33S-031914	1.00	0107		X										X									X				
GAIN-HG-34S-031914	1.00	0112		X										X									X				
GAIN-HG-22D-031914	1.00	0117		X										X									X				
ICSA	1.00	0121		X										X									X				
ICSAB	1.00	0129		X										X									X				
CCV	1.00	0137		X										X									X				
CCB	1.00	0141		X										X									X				

Dissolved Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: Cetac Hg Analyzer Method: CV Run Number: 032414B

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Calibration Blank	1.00	1643																X									
Standard #1	1.00	1644																X									
Standard #2	1.00	1645																X									
Standard #3	1.00	1647																X									
Standard #4	1.00	1648																X									
Standard #5	1.00	1650																X									
Standard #6	1.00	1652																X									
ICV	1.00	1654																X									
ICB	1.00	1656																X									
MRL 0.1	1.00	1657																X									
MB-02113-02	1.00	1659																X									
LCS-02113-01	1.00	1700																X									
GAIN-M-25A-031814	1.00	1701																X									
GAIN-M-25A-031814S	1.00	1702																X									
GAIN-M-25A-031814SD	1.00	1704																X									
GAIN-M-25A-031814A	1.00	1706																X									
GAIN-M-25A-031814L	5.00	1708																X									
GAIN-M-36B-031814	1.00	1709																X									
GAIN-HG-24S-031814	1.00	1710																X									
GAIN-M-25B-031814	1.00	1711																X									
CCV-1	1.00	1712																X									
CCB-1	1.00	1715																X									
GAIN-HG-33S-031914	1.00	1716																X									
GAIN-HG-34S-031914	1.00	1717																X									
GAIN-HG-22D-031914	1.00	1718																X									
ZZZZZZ	1.00	1719																									
ZZZZZZ	1.00	1720																									
ZZZZZZ	1.00	1722																									
ZZZZZZ	1.00	1723																									
ZZZZZZ	1.00	1725																									
ZZZZZZ	1.00	1727																									
ZZZZZZ	5.00	1728																									
CCV-2	1.00	1730																X									
CCB-2	1.00	1732																X									
ZZZZZZ	1.00	1733																									
ZZZZZZ	1.00	1734																									

Dissolved Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: Cetac Hg Analyzer Method: CV Run Number: 032414B

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1735																									
ZZZZZZ	1.00	1736																									
ZZZZZZ	1.00	1737																									
ZZZZZZ	1.00	1738																									
ZZZZZZ	1.00	1740																									
ZZZZZZ	1.00	1741																									
ZZZZZZ	1.00	1742																									
ZZZZZZ	1.00	1743																									
CCV-3	1.00	1745																	X								
CCB-3	1.00	1747																	X								

Dissolved Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: ICP-MS Method: MS Run Number: 032614B

Start Date: 3/26/2014 End Date: 3/27/2014

EPA Sample No.	D/F	Time	% R	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
Cal Blank	1.00	2243			X	X		X	X		X				X		X				X			X				*
Cal 1	1.00	2248			X	X		X	X		X				X		X				X			X				*
Cal 2	1.00	2253			X	X		X	X		X				X		X				X			X				*
Cal 3	1.00	2258			X	X		X	X		X				X		X				X			X				*
Cal 4	1.00	2303			X	X		X	X		X				X		X				X			X				*
ICV	1.00	2308			X	X		X	X		X				X		X				X			X				*
ICB	1.00	2313			X	X		X	X		X				X		X				X			X				*
MRL	1.00	2318			X	X		X	X		X				X		X				X			X				*
ICSA	1.00	2323			X	X		X	X		X				X		X				X			X				*
ICSAB	1.00	2328			X	X		X	X		X				X		X				X			X				*
CCV-1	1.00	2333			X	X		X	X		X				X		X				X			X				*
CCB-1	1.00	2338			X	X		X	X		X				X		X				X			X				*
MB-02133-04	1.00	2343			X	X		X	X		X				X		X				X			X				*
LCS-02133-03	1.00	2348			X	X		X	X		X				X		X				X			X				*
ZZZZZZ	1.00	2353																										
ZZZZZZ	1.00	2358																										
ZZZZZZ	1.00	0003																										
ZZZZZZ	1.00	0008																										
GAIN-M-25A-031814	1.00	0013			X	X		X	X		X				X		X				X			X				*
GAIN-M-36B-031814	1.00	0018			X	X		X	X		X				X		X				X			X				*
GAIN-HG-24S-031814	1.00	0023			X	X		X	X		X				X		X				X			X				*
GAIN-M-25B-031814	1.00	0028			X	X		X	X		X				X		X				X			X				*
CCV-2	1.00	0033			X	X		X	X		X				X		X				X			X				*
CCB-2	1.00	0038			X	X		X	X		X				X		X				X			X				*
GAIN-HG-33S-031914	1.00	0043			X	X		X	X		X				X		X				X			X				*
GAIN-HG-34S-031914	1.00	0049			X	X		X	X		X				X		X				X			X				*
ZZZZZZ	1.00	0054																										
ZZZZZZ	1.00	0059																										
ZZZZZZ	1.00	0104																										
ZZZZZZ	5.00	0109																										
ZZZZZZ	1.00	0114																										
ZZZZZZ	1.00	0119																										
ZZZZZZ	1.00	0124																										
ZZZZZZ	1.00	0129																										
CCV-3	1.00	0134			X	X		X	X		X				X		X				X			X				*
CCB-3	1.00	0139			X	X		X	X		X				X		X				X			X				*

Dissolved Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: ______ SAS No.: ______ SDG No.: J1402025

Instrument ID Number: ICP-MS Method: MS Run Number: 032614B

Start Date: 3/26/2014 End Date: 3/27/2014

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
ZZZZZZ	1.00	0144																										
ZZZZZZ	1.00	0149																										
CCV-4	1.00	0154			X	X		X	X		X				X		X				X			X				*
CCB-4	1.00	0159			X	X		X	X		X				X		X				X			X				*

Dissolved Metals

14

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: ICP-MS Method: MS Run Number: 032814A

Start Date: 3/28/2014 End Date: 3/28/2014

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
Cal Blank	1.00	1312			X	X		X	X		X				X		X				X			X				*
Cal 1	1.00	1317			X	X		X	X		X				X		X				X			X				*
Cal 2	1.00	1322			X	X		X	X		X				X		X				X			X				*
Cal 3	1.00	1327			X	X		X	X		X				X		X				X			X				*
Cal 4	1.00	1332			X	X		X	X		X				X		X				X			X				*
ICV	1.00	1337			X	X		X	X		X				X		X				X			X				*
ICB	1.00	1342			X	X		X	X		X				X		X				X			X				*
MRL	1.00	1347			X	X		X	X		X				X		X				X			X				*
ICSA	1.00	1352			X	X		X	X		X				X		X				X			X				*
ICSAB	1.00	1357			X	X		X	X		X				X		X				X			X				*
CCV-1	1.00	1402			X	X		X	X		X				X		X				X			X				*
CCB-1	1.00	1408			X	X		X	X		X				X		X				X			X				*
MB-02258-02	1.00	1413			X	X		X	X		X				X		X				X			X				*
LCS-02258-01	1.00	1418			X	X		X	X		X				X		X				X			X				*
GAIN-HG-22D-031914	1.00	1423			X	X		X	X		X				X		X				X			X				*
GAIN-HG-22D-031914S	1.00	1428			X	X		X	X		X				X		X				X			X				*
GAIN-HG-22D-031914S	1.00	1433			X	X		X	X		X				X		X				X			X				*
GAIN-HG-22D-031914L	5.00	1438			X	X		X	X		X				X		X				X			X				*
GAIN-HG-22D-031914A	1.00	1443			X	X		X	X		X				X		X				X			X				*
ZZZZZZ	1.00	1448																										
ZZZZZZ	1.00	1453																										
ZZZZZZ	1.00	1458																										
CCV-2	1.00	1503			X	X		X	X		X				X		X				X			X				*
CCB-2	1.00	1508			X	X		X	X		X				X		X				X			X				*
ZZZZZZ	1.00	1513																										
ZZZZZZ	1.00	1518																										
ZZZZZZ	5.00	1523																										
ZZZZZZ	1.00	1528																										
ZZZZZZ	1.00	1533																										
CCV-3	1.00	1538			X	X		X	X		X				X		X				X			X				*
CCB-3	1.00	1543			X	X		X	X		X				X		X				X			X				*
ZZZZZZ	1.00	1548																										
ZZZZZZ	1.00	1553																										

Inorganic Analysis:

General Chemistry and Physical Parameters

Summary Package

Sample and QC Results

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Beazer East, Inc.	**Service Request:**	J1402025
Project:	Gainesville March 2014 UIC GW Monitoring/OM-0450-14	**Date Collected:**	3/18/14 - 3/19/14
Sample Matrix:	Water	**Date Received:**	3/19/14
		Units:	mg/L
Analysis Method:	300.0	**Basis:**	NA

Chloride

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
GAIN-M-25A-031814	J1402025-001	**1.3**		1.0	0.2	1	NA	3/21/14 21:15	
GAIN-M-36B-031814	J1402025-002	**7.8**		1.0	0.2	1	NA	3/21/14 21:31	
GAIN-HG-24S-031814	J1402025-003	**9.1**		1.0	0.2	1	NA	3/21/14 21:47	
GAIN-M-25B-031814	J1402025-004	**26.7**		1.0	0.2	1	NA	3/21/14 22:35	
GAIN-HG-33S-031914	J1402025-005	**7.8**		1.0	0.2	1	NA	3/21/14 22:51	
GAIN-HG-34S-031914	J1402025-006	**28.5**		1.0	0.2	1	NA	3/21/14 23:07	
GAIN-HG-22D-031914	J1402025-007	**3.1**		1.0	0.2	1	NA	3/21/14 23:23	
Method Blank	J1402025-MB	ND	U	1.0	0.2	1	NA	3/21/14 13:21	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Collected: 3/18/14 - 3/19/14
Date Received: 3/19/14

Units: ColorUnits
Basis: NA

Analysis Method: SM 2120 B

Color, True

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
GAIN-M-25A-031814	J1402025-001	ND	U	5.0	5.0	1	NA	3/19/14 18:15	
GAIN-M-36B-031814	J1402025-002	**10.0**		5.0	5.0	1	NA	3/19/14 18:19	
GAIN-HG-24S-031814	J1402025-003	ND	U	5.0	5.0	1	NA	3/19/14 18:20	
GAIN-M-25B-031814	J1402025-004	**10.0**		5.0	5.0	1	NA	3/19/14 18:27	
GAIN-HG-33S-031914	J1402025-005	**5.0**		5.0	5.0	1	NA	3/19/14 18:30	
GAIN-HG-34S-031914	J1402025-006	**5.0**		5.0	5.0	1	NA	3/19/14 18:32	
GAIN-HG-22D-031914	J1402025-007	**30.0**		5.0	5.0	1	NA	3/19/14 18:34	
Method Blank	J1402025-MB	ND	U	5.0	5.0	1	NA	3/19/14 18:08	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Beazer East, Inc.	**Service Request:**	J1402025
Project:	Gainesville March 2014 UIC GW Monitoring/OM-0450-14	**Date Collected:**	3/18/14 - 3/19/14
Sample Matrix:	Water	**Date Received:**	3/19/14
		Units:	pH Units
Analysis Method:	SM 2120 B	**Basis:**	NA

pH of Color Analysis

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
GAIN-M-25A-031814	J1402025-001	6.96		-		1	NA	3/19/14 18:15	
GAIN-M-36B-031814	J1402025-002	7.48		-		1	NA	3/19/14 18:19	
GAIN-HG-24S-031814	J1402025-003	7.27		-		1	NA	3/19/14 18:20	
GAIN-M-25B-031814	J1402025-004	6.41		-		1	NA	3/19/14 18:27	
GAIN-HG-33S-031914	J1402025-005	7.41		-		1	NA	3/19/14 18:30	
GAIN-HG-34S-031914	J1402025-006	9.00		-		1	NA	3/19/14 18:32	
GAIN-HG-22D-031914	J1402025-007	7.17		-		1	NA	3/19/14 18:34	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Collected: 3/18/14 - 3/19/14
Date Received: 3/19/14

Analysis Method: SM 2540 C

Units: mg/L
Basis: NA

Solids, Total Dissolved

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
GAIN-M-25A-031814	J1402025-001	**163**		10	10	1	NA	3/21/14 16:00	
GAIN-M-36B-031814	J1402025-002	**163**		10	10	1	NA	3/21/14 16:00	
GAIN-HG-24S-031814	J1402025-003	**132**		10	10	1	NA	3/21/14 16:00	
GAIN-M-25B-031814	J1402025-004	**196**		10	10	1	NA	3/21/14 16:00	
GAIN-HG-33S-031914	J1402025-005	**162**		10	10	1	NA	3/21/14 16:00	
GAIN-HG-34S-031914	J1402025-006	**119**		10	10	1	NA	3/21/14 16:00	
GAIN-HG-22D-031914	J1402025-007	**154**		10	10	1	NA	3/21/14 16:00	
Method Blank	J1402025-MB	ND	U	10	10	1	NA	3/21/14 16:00	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Collected: 3/18/14 - 3/19/14
Date Received: 3/19/14

Units: pH Units
Basis: NA

Analysis Method: SM 4500-H+ B

pH

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
GAIN-M-25A-031814	J1402025-001	7.45		-		1	NA	3/21/14 21:02	Q
GAIN-M-36B-031814	J1402025-002	7.83		-		1	NA	3/21/14 21:13	Q
GAIN-HG-24S-031814	J1402025-003	7.68		-		1	NA	3/21/14 21:21	Q
GAIN-M-25B-031814	J1402025-004	7.00		-		1	NA	3/21/14 21:30	Q
GAIN-HG-33S-031914	J1402025-005	7.86		-		1	NA	3/21/14 21:38	Q
GAIN-HG-34S-031914	J1402025-006	8.92		-		1	NA	3/21/14 21:46	Q
GAIN-HG-22D-031914	J1402025-007	7.62		-		1	NA	3/21/14 21:55	Q

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	Beazer East, Inc.	**Service Request:**	J1402025
Project:	Gainesville March 2014 UIC GW Monitoring/OM-0450-14	**Date Collected:**	3/19/14
Sample Matrix:	Water	**Date Received:**	3/19/14
		Date Analyzed:	3/21/14

Matrix Spike Summary
General Chemistry Parameters

Sample Name:	GAIN-HG-22D-031914	**Units:**	mg/L
Lab Code:	J1402025-007	**Basis:**	NA

Analytical Method: 300.0

GAIN-HG-22D-031914MS
Matrix Spike
J1402025-007MS

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Chloride	3.1	53.5	50.0	101	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Collected: 3/18/14
Date Received: 3/19/14
Date Analyzed: 3/19/14

Replicate Sample Summary
General Chemistry Parameters

Sample Name: GAIN-M-25A-031814
Lab Code: J1402025-001

Units: ColorUnits
Basis: NA

Analyte Name	Method	LOQ	MDL	Sample Result	GAIN-M-25A-031814DUP Duplicate Sample J1402025-001DUP Result	Average	RPD	RPD Limit
Color, True	SM 2120 B	5.0	5.0	ND U	ND U	NC	NC	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Collected: 3/18/14
Date Received: 3/19/14
Date Analyzed: 3/21/14

Replicate Sample Summary
General Chemistry Parameters

Sample Name: GAIN-M-25B-031814
Lab Code: J1402025-004

Units: mg/L
Basis: NA

Analyte Name	Method	LOQ	MDL	Sample Result	GAIN-M-25B-031814DUP Duplicate Sample J1402025-004DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved	SM 2540 C	10	10	196	194	195	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	Beazer East, Inc.	**Service Request:**	J1402025
Project:	Gainesville March 2014 UIC GW Monitoring/OM-0450-14	**Date Collected:**	3/19/14
Sample Matrix:	Water	**Date Received:**	3/19/14
		Date Analyzed:	3/21/14

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	GAIN-HG-22D-031914	**Units:**	mg/L
Lab Code:	J1402025-007	**Basis:**	NA

Analyte Name	Method	LOQ	MDL	Sample Result	GAIN-HG-22D-0319 14DUP Duplicate Sample J1402025-007DUP Result	Average	RPD	RPD Limit
Chloride	300.0	1.0	0.2	3.1	3.0	3.05	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	Beazer East, Inc.	**Service Request:**	J1402025
Project:	Gainesville March 2014 UIC GW Monitoring/OM-0450-14	**Date Collected:**	3/19/14
Sample Matrix:	Water	**Date Received:**	3/19/14
		Date Analyzed:	3/21/14

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	GAIN-HG-22D-031914	**Units:**	pH Units
Lab Code:	J1402025-007	**Basis:**	NA

Analyte Name	Method	LOQ	MDL	Sample Result	GAIN-HG-22D-0319 14DUP **Duplicate Sample** J1402025-007DUP Result	Average	RPD	RPD Limit
pH	SM 4500-H+ B	-		7.62	7.62	7.62	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Analyzed: 3/19/14 - 3/21/14

Lab Control Sample Summary
General Chemistry Parameters

Units: ColorUnits
Basis: NA

Lab Control Sample
J1402025-LCS

Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Color, True	SM 2120 B	30.0	25.0	120	80 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Analyzed: 3/19/14 - 3/21/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Lab Control Sample
J1402025-LCS

Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	50.1	50.0	100	90 - 110
Solids, Total Dissolved	SM 2540 C	301	300	100	85 - 115

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Validation Package

9143 Philips Highway, Suite 200
Jacksonville, Florida 32256
Phone: (904) 739-2277 Fax (904) 739-2011
www.alsglobal.com

Inorganic Analysis:

Metals

Validation Package

Sample and QC Results

ALS Environmental

Total Metals
- COVER PAGE -
INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc.

SDG No.: J1402025 Method Type: 6010B/6020/74 SOW No.:

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Lab Sample ID	Client Sample ID	QC Description
J1402025-001	GAIN-M-25A-031814	
J1402025-002	GAIN-M-36B-031814	
J1402025-003	GAIN-HG-24S-031814	
J1402025-003S	GAIN-HG-24S-031814S	Matrix Spike
J1402025-003SD	GAIN-HG-24S-031814SD	Matrix Spike Duplicate
J1402025-004	GAIN-M-25B-031814	
J1402025-005	GAIN-HG-33S-031914	
J1402025-006	GAIN-HG-34S-031914	
J1402025-007	GAIN-HG-22D-031914	
J1402025-007S	GAIN-HG-22D-031914S	Matrix Spike
J1402025-007SD	GAIN-HG-22D-031914SD	Matrix Spike Duplicate

Were ICP interelement corrections applied? Yes/No Yes

Were ICP background corrections applied? Yes/No Yes
If yes - were raw data generated before applications of background corrections? Yes/No No

Comments: Perkin Elmer MSF program is used for IEC corrections

I certify that this data package is in compliance with the terms and conditions of the ~~contract, both technically and for completeness, for other than the conditions detailed~~ above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Name: Craig Myers

Date: 4/8/14 Title: Project Manager

Total Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-001 **Client ID:** GAIN-M-25A-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204592 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	192	ug/L			6010B	11	100	1.00	3/21/2014	20:24:50
Antimony	1.2	ug/L			6020	0.160	1.0	1.00	3/24/2014	18:08
Arsenic	1.2	ug/L			6020	0.42	1.0	1.00	3/24/2014	18:08
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/24/2014	18:08
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/24/2014	18:08
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/24/2014	18:08
Iron	265	ug/L			6010B	2.5	100	1.00	3/21/2014	20:24:50
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/24/2014	18:08
Lithium	10.0	ug/L	U		6010B	10.0	100	1.00	3/21/2014	20:24:50
Manganese	0.5	ug/L	i		6020	0.1	2.0	1.00	3/24/2014	18:08
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	19:33:54
Molybdenum	2.80	ug/L			6020	0.28	2.00	1.00	3/24/2014	18:08
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/24/2014	18:08
Sodium	1610	ug/L			6010B	29	500	1.00	3/21/2014	20:24:50
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/24/2014	18:08

Comments:

Total Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-002 **Client ID:** GAIN-M-36B-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204592 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	96	ug/L	I		6010B	11	100	1.00	3/21/2014	20:29:43
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/24/2014	18:13
Arsenic	0.78	ug/L	i		6020	0.42	1.0	1.00	3/24/2014	18:13
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/24/2014	18:13
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/24/2014	18:13
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/24/2014	18:13
Iron	909	ug/L			6010B	2.5	100	1.00	3/21/2014	20:29:43
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/24/2014	18:13
Lithium	10.0	ug/L	U		6010B	10.0	100	1.00	3/21/2014	20:29:43
Manganese	27	ug/L			6020	0.1	2.0	1.00	3/24/2014	18:13
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	19:35:03
Molybdenum	2.30	ug/L			6020	0.28	2.00	1.00	3/24/2014	18:13
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/24/2014	18:13
Sodium	6740	ug/L			6010B	29	500	1.00	3/21/2014	20:29:43
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/24/2014	18:13

Comments:

Total Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-003

Client ID: GAIN-HG-24S-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204592 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	68	ug/L	I		6010B	11	100	1.00	3/21/2014	20:34:36
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/24/2014	18:18
Arsenic	2.7	ug/L			6020	0.42	1.0	1.00	3/24/2014	18:18
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/24/2014	18:18
Cadmium	0.090	ug/L	i		6020	0.090	0.400	1.00	3/24/2014	18:18
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/24/2014	18:18
Iron	830	ug/L			6010B	2.5	100	1.00	3/21/2014	20:34:36
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/24/2014	18:18
Lithium	10.0	ug/L	U		6010B	10.0	100	1.00	3/21/2014	20:34:36
Manganese	26	ug/L			6020	0.1	2.0	1.00	3/24/2014	18:18
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	19:36:12
Molybdenum	5.70	ug/L			6020	0.28	2.00	1.00	3/24/2014	18:18
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/24/2014	18:18
Sodium	5420	ug/L			6010B	29	500	1.00	3/21/2014	20:34:36
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/24/2014	18:18

Comments:

Total Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-004 **Client ID:** GAIN-M-25B-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204592 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	39	ug/L	I		6010B	11	100	1.00	3/21/2014	20:47:29
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/24/2014	18:23
Arsenic	4.0	ug/L			6020	0.42	1.0	1.00	3/24/2014	18:23
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/24/2014	18:23
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/24/2014	18:23
Chromium	0.30	ug/L	i		6020	0.18	1.0	1.00	3/24/2014	18:23
Iron	286	ug/L			6010B	2.5	100	1.00	3/21/2014	20:47:29
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/24/2014	18:23
Lithium	10.0	ug/L	U		6010B	10.0	100	1.00	3/21/2014	20:47:29
Manganese	63	ug/L			6020	0.1	2.0	1.00	3/24/2014	18:23
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	19:47:01
Molybdenum	0.28	ug/L	U		6020	0.28	2.00	1.00	3/24/2014	18:23
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/24/2014	18:23
Sodium	17100	ug/L			6010B	29	500	1.00	3/21/2014	20:47:29
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/24/2014	18:23

Comments:

Total Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-005 **Client ID:** GAIN-HG-33S-031914

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204592 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	304	ug/L			6010B	11	100	1.00	3/21/2014	20:52:22
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/24/2014	18:38
Arsenic	0.78	ug/L	i		6020	0.42	1.0	1.00	3/24/2014	18:38
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/24/2014	18:38
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/24/2014	18:38
Chromium	0.32	ug/L	i		6020	0.18	1.0	1.00	3/24/2014	18:38
Iron	999	ug/L			6010B	2.5	100	1.00	3/21/2014	20:52:22
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/24/2014	18:38
Lithium	10.0	ug/L	U		6010B	10.0	100	1.00	3/21/2014	20:52:22
Manganese	28	ug/L			6020	0.1	2.0	1.00	3/24/2014	18:38
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	19:48:08
Molybdenum	1.80	ug/L	i		6020	0.28	2.00	1.00	3/24/2014	18:38
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/24/2014	18:38
Sodium	6640	ug/L			6010B	29	500	1.00	3/21/2014	20:52:22
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/24/2014	18:38

Comments:

Total Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-006

Client ID: GAIN-HG-34S-031914

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204592 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	478	ug/L			6010B	11	100	1.00	3/21/2014	20:57:14
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/24/2014	18:43
Arsenic	0.69	ug/L	i		6020	0.42	1.0	1.00	3/24/2014	18:43
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/24/2014	18:43
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/24/2014	18:43
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/24/2014	18:43
Iron	18	ug/L	I		6010B	2.5	100	1.00	3/21/2014	20:57:14
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/24/2014	18:43
Lithium	10.0	ug/L	U		6010B	10.0	100	1.00	3/21/2014	20:57:14
Manganese	0.6	ug/L	i		6020	0.1	2.0	1.00	3/24/2014	18:43
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	19:49:16
Molybdenum	7.50	ug/L			6020	0.28	2.00	1.00	3/24/2014	18:43
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/24/2014	18:43
Sodium	11000	ug/L			6010B	29	500	1.00	3/21/2014	20:57:14
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/24/2014	18:43

Comments:

Total Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-007

Client ID: GAIN-HG-22D-031914

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204592 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	165	ug/L			6010B	11	100	1.00	3/21/2014	21:02:07
Antimony	0.470	ug/L	i		6020	0.160	1.0	1.00	3/24/2014	18:48
Arsenic	0.88	ug/L	i		6020	0.42	1.0	1.00	3/24/2014	18:48
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/24/2014	18:48
Cadmium	15	ug/L			6020	0.090	0.400	1.00	3/24/2014	18:48
Chromium	11	ug/L			6020	0.18	1.0	1.00	3/24/2014	18:48
Iron	927	ug/L			6010B	2.5	100	1.00	3/21/2014	21:02:07
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/24/2014	18:48
Lithium	10.0	ug/L	U		6010B	10.0	100	1.00	3/21/2014	21:02:07
Manganese	16	ug/L			6020	0.1	2.0	1.00	3/24/2014	18:48
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	19:50:24
Molybdenum	2.10	ug/L			6020	0.28	2.00	1.00	3/24/2014	18:48
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/24/2014	18:48
Sodium	2810	ug/L			6010B	29	500	1.00	3/21/2014	21:02:07
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/24/2014	18:48

Comments:

Total Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: High Purity STDs

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
ICV									
	Aluminum	50100.00	50000	100	90.0 - 110.0	6010B	3/21/2014	18:01	032114A1
	Iron	39200.0	40000	98	90.0 - 110.0	6010B	3/21/2014	18:01	032114A1
	Lithium	5130.00	5000	103	90.0 - 110.0	6010B	3/21/2014	18:01	032114A1
	Sodium	20600.00	20000	103	90.0 - 110.0	6010B	3/21/2014	18:01	032114A1
CCV									
	Aluminum	4980.00	5000	100	90.0 - 110.0	6010B	3/21/2014	18:35	032114A1
	Iron	5080.0	5000	102	90.0 - 110.0	6010B	3/21/2014	18:35	032114A1
	Lithium	4970.00	5000	99	90.0 - 110.0	6010B	3/21/2014	18:35	032114A1
	Sodium	25100.00	25000	100	90.0 - 110.0	6010B	3/21/2014	18:35	032114A1
CCV									
	Aluminum	4900.00	5000	98	90.0 - 110.0	6010B	3/21/2014	19:42	032114A1
	Iron	4980.0	5000	100	90.0 - 110.0	6010B	3/21/2014	19:42	032114A1
	Lithium	4980.00	5000	100	90.0 - 110.0	6010B	3/21/2014	19:42	032114A1
	Sodium	25200.00	25000	101	90.0 - 110.0	6010B	3/21/2014	19:42	032114A1
CCV									
	Aluminum	4890.00	5000	98	90.0 - 110.0	6010B	3/21/2014	20:38	032114A1
	Iron	4980.0	5000	100	90.0 - 110.0	6010B	3/21/2014	20:38	032114A1
	Lithium	4980.00	5000	100	90.0 - 110.0	6010B	3/21/2014	20:38	032114A1
	Sodium	25200.00	25000	101	90.0 - 110.0	6010B	3/21/2014	20:38	032114A1
CCV									
	Aluminum	5010.00	5000	100	90.0 - 110.0	6010B	3/21/2014	21:30	032114A1
	Iron	5060.0	5000	101	90.0 - 110.0	6010B	3/21/2014	21:30	032114A1
	Lithium	5020.00	5000	100	90.0 - 110.0	6010B	3/21/2014	21:30	032114A1
	Sodium	25300.00	25000	101	90.0 - 110.0	6010B	3/21/2014	21:30	032114A1
CCV									
	Aluminum	4890.00	5000	98	90.0 - 110.0	6010B	3/21/2014	22:18	032114A1
	Iron	4900.0	5000	98	90.0 - 110.0	6010B	3/21/2014	22:18	032114A1
	Lithium	5040.00	5000	101	90.0 - 110.0	6010B	3/21/2014	22:18	032114A1
	Sodium	25400.00	25000	102	90.0 - 110.0	6010B	3/21/2014	22:18	032114A1

Total Metals
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: High Purity STDs

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
CCV									
	Aluminum	4900.00	5000	98	90.0 - 110.0	6010B	3/21/2014	23:11	032114A1
	Iron	4930.0	5000	99	90.0 - 110.0	6010B	3/21/2014	23:11	032114A1
	Lithium	5050.00	5000	101	90.0 - 110.0	6010B	3/21/2014	23:11	032114A1
	Sodium	25400.00	25000	102	90.0 - 110.0	6010B	3/21/2014	23:11	032114A1
CCV									
	Aluminum	4930.00	5000	99	90.0 - 110.0	6010B	3/21/2014	23:59	032114A1
	Iron	4950.0	5000	99	90.0 - 110.0	6010B	3/21/2014	23:59	032114A1
	Lithium	5050.00	5000	101	90.0 - 110.0	6010B	3/21/2014	23:59	032114A1
	Sodium	25400.00	25000	102	90.0 - 110.0	6010B	3/21/2014	23:59	032114A1
CCV									
	Aluminum	4960.00	5000	99	90.0 - 110.0	6010B	3/22/2014	00:49	032114A1
	Iron	4990.0	5000	100	90.0 - 110.0	6010B	3/22/2014	00:49	032114A1
	Lithium	5080.00	5000	102	90.0 - 110.0	6010B	3/22/2014	00:49	032114A1
	Sodium	25400.00	25000	102	90.0 - 110.0	6010B	3/22/2014	00:49	032114A1
CCV									
	Aluminum	4980.00	5000	100	90.0 - 110.0	6010B	3/22/2014	01:37	032114A1
	Iron	4990.0	5000	100	90.0 - 110.0	6010B	3/22/2014	01:37	032114A1
	Lithium	5110.00	5000	102	90.0 - 110.0	6010B	3/22/2014	01:37	032114A1
	Sodium	25600.00	25000	102	90.0 - 110.0	6010B	3/22/2014	01:37	032114A1
ICV									
	~~Antimony~~	~~50.5~~	~~50~~	~~101~~	~~90.0 - 110.0~~	~~6020~~	~~3/24/2014~~	~~17:03~~	~~032414A~~
	Arsenic	48.1	50	96	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Beryllium	19.6	20	98	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Cadmium	25.7	25	103	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Chromium	50.8	50	102	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Lead	50.4	50	101	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Manganese	50.9	50	102	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Molybdenum	51.4	50	103	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Selenium	51.1	50	102	90.0 - 110.0	6020	3/24/2014	17:03	032414A
	Thallium	49.2	50	98	90.0 - 110.0	6020	3/24/2014	17:03	032414A

Total Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: High Purity Standards

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
CCV-1									
	Antimony	50.1	50	100	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Arsenic	50.7	50	101	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Beryllium	24.0	25	96	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Cadmium	20.6	20	103	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Chromium	50.1	50	100	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Lead	25.4	25	102	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Manganese	101.0	100	101	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Molybdenum	101.0	100	101	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Selenium	101.0	100	101	90.0 - 110.0	6020	3/24/2014	17:28	032414A
	Thallium	10.0	10	100	90.0 - 110.0	6020	3/24/2014	17:28	032414A
CCV-2									
	Antimony	49.5	50	99	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Arsenic	51.5	50	103	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Beryllium	23.6	25	94	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Cadmium	21.0	20	105	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Chromium	50.0	50	100	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Lead	25.6	25	102	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Manganese	102.0	100	102	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Molybdenum	100.0	100	100	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Selenium	102.0	100	102	90.0 - 110.0	6020	3/24/2014	18:28	032414A
	Thallium	10.0	10	100	90.0 - 110.0	6020	3/24/2014	18:28	032414A
CCV-3									
	Antimony	50.3	50	101	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Arsenic	51.6	50	103	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Beryllium	25.1	25	100	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Cadmium	21.2	20	106	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Chromium	50.9	50	102	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Lead	25.5	25	102	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Manganese	102.0	100	102	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Molybdenum	101.0	100	101	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Selenium	102.0	100	102	90.0 - 110.0	6020	3/24/2014	19:29	032414A
	Thallium	10.1	10	101	90.0 - 110.0	6020	3/24/2014	19:29	032414A

Total Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: High Purity Standards

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
CCV-4									
	Antimony	49.0	50	98	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Arsenic	51.5	50	103	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Beryllium	26.6	25	106	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Cadmium	20.4	20	102	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Chromium	50.8	50	102	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Lead	25.6	25	102	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Manganese	102.0	100	102	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Molybdenum	101.0	100	101	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Selenium	101.0	100	101	90.0 - 110.0	6020	3/24/2014	20:29	032414A
	Thallium	10.1	10	101	90.0 - 110.0	6020	3/24/2014	20:29	032414A
ICV									
	Mercury	4.97	5	99	90.0 - 110.0	7470A	3/24/2014	19:22	032414C
CCV-1									
	Mercury	5.02	5	100	80.0 - 120.0	7470A	3/24/2014	19:39	032414C
CCV-2									
	Mercury	5.03	5	101	80.0 - 120.0	7470A	3/24/2014	19:54	032414C
CCV-3									
	Mercury	5.01	5	100	80.0 - 120.0	7470A	3/24/2014	20:04	032414C

Total Metals
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CRDL STANDARD FOR AA & ICP

Client: Beazer East, Inc.   SDG No.: J1402025

Contract: OM-0450-14   Lab Code: ALJCK   Case No: SAS No.:

AA CRDL Standard Source:

ICP CRDL Standard Source: High Purity STDs

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Advisory Limits (%R)	Method	Analysis Date	Analysis Time	Run Number
MRL									
	Aluminum	68.60	100	69	50 - 150	6010B	3/21/2014	18:15	032114A1
	Iron	106.0	100	106	50 - 150	6010B	3/21/2014	18:15	032114A1
	Lithium	98.8	20	99	50 - 150	6010B	3/21/2014	18:15	032114A1
	Sodium	546.00	500	109	50 - 150	6010B	3/21/2014	18:15	032114A1
MRL									
	Antimony	1.07	1	107	50 - 150	6020	3/24/2014	17:13	032414A
	Arsenic	0.66	1	66	50 - 150	6020	3/24/2014	17:13	032414A
	Beryllium	0.44	.5	88	50 - 150	6020	3/24/2014	17:13	032414A
	Cadmium	0.39	.4	98	50 - 150	6020	3/24/2014	17:13	032414A
	Chromium	0.99	1	99	50 - 150	6020	3/24/2014	17:13	032414A
	Lead	0.37	.5	74	50 - 150	6020	3/24/2014	17:13	032414A
	Manganese	2.02	2	101	50 - 150	6020	3/24/2014	17:13	032414A
	Molybdenum	1.93	2	96	50 - 150	6020	3/24/2014	17:13	032414A
	Selenium	1.73	2	86	50 - 150	6020	3/24/2014	17:13	032414A
	Thallium	0.17	.2	85	50 - 150	6020	3/24/2014	17:13	032414A
MRL 0.1									
	Mercury	0.10	.1	100	50 - 150	7470A	3/24/2014	19:25	032414C

Total Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
ICB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	18:05	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	18:05	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/21/2014	18:05	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	18:05	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	18:39	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	18:39	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/21/2014	18:39	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	18:39	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	19:46	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	19:46	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/21/2014	19:46	032114A1
	Sodium	35.600	+/-500.000	I	29.000	500.000	6010B	3/21/2014	19:46	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	20:42	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	20:42	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/21/2014	20:42	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	20:42	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	21:34	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	21:34	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/21/2014	21:34	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	21:34	032114A1

Total Metals
- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	22:22	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	22:22	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/21/2014	22:22	032114A1
	Sodium	35.000	+/-500.000	I	29.000	500.000	6010B	3/21/2014	22:22	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	23:14	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	23:14	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/21/2014	23:14	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	23:14	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/22/2014	00:02	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/22/2014	00:02	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/22/2014	00:02	032114A1
	Sodium	29.900	+/-500.000	I	29.000	500.000	6010B	3/22/2014	00:02	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/22/2014	00:53	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/22/2014	00:53	032114A1
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/22/2014	00:53	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/22/2014	00:53	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/22/2014	01:41	032114A1
	~~Iron~~	~~2.50~~	~~+/-100.00~~	~~U~~	~~2.50~~	~~100.00~~	~~6010B~~	~~3/22/2014~~	~~01:41~~	~~032114A1~~
	Lithium	10.0	+/-100.0	U	10.0	100.0	6010B	3/22/2014	01:41	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/22/2014	01:41	032114A1

Total Metals
- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
ICB										
	Antimony	0.30	+/-1.00	i	0.16	1.00	6020	3/24/2014	17:08	032414A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/24/2014	17:08	032414A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/24/2014	17:08	032414A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/24/2014	17:08	032414A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/24/2014	17:08	032414A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/24/2014	17:08	032414A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/24/2014	17:08	032414A
	Molybdenum	0.28	+/-2.00	U	0.28	2.00	6020	3/24/2014	17:08	032414A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/24/2014	17:08	032414A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/24/2014	17:08	032414A
CCB-1										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/24/2014	17:33	032414A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/24/2014	17:33	032414A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/24/2014	17:33	032414A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/24/2014	17:33	032414A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/24/2014	17:33	032414A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/24/2014	17:33	032414A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/24/2014	17:33	032414A
	Molybdenum	0.55	+/-2.00	i	0.28	2.00	6020	3/24/2014	17:33	032414A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/24/2014	17:33	032414A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/24/2014	17:33	032414A
CCB-2										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/24/2014	18:33	032414A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/24/2014	18:33	032414A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/24/2014	18:33	032414A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/24/2014	18:33	032414A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/24/2014	18:33	032414A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/24/2014	18:33	032414A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/24/2014	18:33	032414A
	Molybdenum	0.28	+/-2.00	U	0.28	2.00	6020	3/24/2014	18:33	032414A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/24/2014	18:33	032414A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/24/2014	18:33	032414A

Total Metals
- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
CCB-3										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/24/2014	19:34	032414A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/24/2014	19:34	032414A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/24/2014	19:34	032414A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/24/2014	19:34	032414A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/24/2014	19:34	032414A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/24/2014	19:34	032414A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/24/2014	19:34	032414A
	Molybdenum	0.28	+/-2.00	U	0.28	2.00	6020	3/24/2014	19:34	032414A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/24/2014	19:34	032414A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/24/2014	19:34	032414A
CCB-4										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/24/2014	20:34	032414A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/24/2014	20:34	032414A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/24/2014	20:34	032414A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/24/2014	20:34	032414A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/24/2014	20:34	032414A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/24/2014	20:34	032414A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/24/2014	20:34	032414A
	Molybdenum	0.28	+/-2.00	U	0.28	2.00	6020	3/24/2014	20:34	032414A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/24/2014	20:34	032414A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/24/2014	20:34	032414A
ICB										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	19:24	032414C
CCB-1										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	19:41	032414C
CCB-2										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	19:56	032414C

Total Metals
- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
CCB-3										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	20:06	032414C

Total Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Beazer East, Inc.   SDG No.: J1402025

Contract: OM-0450-14   Lab Code: ALJCK   Case No.:   SAS No.:

Sample ID	Analyte	Result (ug/L)	Conc Qual	Q	Acceptance Limit	MDL	MRL	Method	Analysis Date	Analysis Time	Run
MB-02131-02			**WATER**								
	Aluminum	11.000	U		+/-11.000	11.000	100.000	6010B	3/21/2014	19:05	032114A1
	Iron	9.600	J		+/-2.500	2.500	100.000	6010B	3/21/2014	19:05	032114A1
	Lithium	10.000	U		+/-10.000	10.000	100.000	6010B	3/21/2014	19:05	032114A1
	Sodium	29.000	U		+/-29.000	29.000	500.000	6010B	3/21/2014	19:05	032114A1
MB-02159-02			**WATER**								
	Mercury	0.012	U		+/-0.012	0.012	0.100	7470A	3/24/2014	19:26	032414C
MB-02134-04			**WATER**								
	Antimony	0.160	U		+/-0.160	0.160	1.000	6020	3/24/2014	17:38	032414A
	Arsenic	0.420	U		+/-0.420	0.420	1.000	6020	3/24/2014	17:38	032414A
	Beryllium	0.032	U		+/-0.032	0.032	0.500	6020	3/24/2014	17:38	032414A
	Cadmium	0.091	U		+/-0.091	0.091	0.400	6020	3/24/2014	17:38	032414A
	Chromium	0.180	U		+/-0.180	0.180	1.000	6020	3/24/2014	17:38	032414A
	Lead	0.120	U		+/-0.120	0.120	0.500	6020	3/24/2014	17:38	032414A
	Manganese	0.120	U		+/-0.120	0.120	2.000	6020	3/24/2014	17:38	032414A
	Molybdenum	0.280	U		+/-0.280	0.280	2.000	6020	3/24/2014	17:38	032414A
	Selenium	1.100	U		+/-1.100	1.100	2.000	6020	3/24/2014	17:38	032414A
	Thallium	0.050	U		+/-0.050	0.050	0.200	6020	3/24/2014	17:38	032414A

Total Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

ICS Source: Instrument ID: PE Optima ICP

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Method	Analysis Date	Analysis Time	Run Number
ICSA									
	Aluminum	753000	750000	100	80 - 120%	6010B	3/21/2014	18:19	032114A1
	Iron	668000	750000	89	80 - 120%	6010B	3/21/2014	18:19	032114A1
	Lithium	-6			0.0 to 0.0	6010B	3/21/2014	18:19	032114A1
	Sodium	34			0.0 to 0.0	6010B	3/21/2014	18:19	032114A1
ICSAB									
	Aluminum	766000	752000	102	80 - 120%	6010B	3/21/2014	18:27	032114A1
	Iron	677000	752000	90	80 - 120%	6010B	3/21/2014	18:27	032114A1
	Lithium	2250.0	2000	112	80 - 120%	6010B	3/21/2014	18:27	032114A1
	Sodium	11200	10000	112	80 - 120%	6010B	3/21/2014	18:27	032114A1
ICSA									
	Aluminum	757000	750000	101	80 - 120%	6010B	3/22/2014	01:21	032114A1
	Iron	667000	750000	89	80 - 120%	6010B	3/22/2014	01:21	032114A1
	Lithium	-5			0.0 to 0.0	6010B	3/22/2014	01:21	032114A1
	Sodium	28			0.0 to 0.0	6010B	3/22/2014	01:21	032114A1
ICSAB									
	Aluminum	770000	752000	102	80 - 120%	6010B	3/22/2014	01:29	032114A1
	Iron	678000	752000	90	80 - 120%	6010B	3/22/2014	01:29	032114A1
	Lithium	2300.0	2000	115	80 - 120%	6010B	3/22/2014	01:29	032114A1
	Sodium	11400	10000	114	80 - 120%	6010B	3/22/2014	01:29	032114A1
ICSA									
	Antimony	0.1			-2.0 to 2.0	6020	3/24/2014	17:18	032414A
	Arsenic	0.7			-2.0 to 2.0	6020	3/24/2014	17:18	032414A
	Beryllium	-0.074			-1.000 to 1.000	6020	3/24/2014	17:18	032414A
	Cadmium	0.1			-0.8 to 0.8	6020	3/24/2014	17:18	032414A
	Chromium	1.0			-2.0 to 2.0	6020	3/24/2014	17:18	032414A
	Lead	0.0			-1.0 to 2.0	6020	3/24/2014	17:18	032414A
	Manganese	0.3			-4.0 to 4.0	6020	3/24/2014	17:18	032414A
	Molybdenum	1110.0	1000	111	80 - 120%	6020	3/24/2014	17:18	032414A
	Selenium	-1.7			-4.0 to 4.0	6020	3/24/2014	17:18	032414A
	Thallium	0.0			-0.4 to 0.4	6020	3/24/2014	17:18	032414A

Total Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: Beazer East, Inc.   SDG No.: J1402025

Contract: OM-0450-14   Lab Code: ALJCK   Case No.:   SAS No.:

ICS Source: Instrument ID: ICP-MS

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Method	Analysis Date	Analysis Time	Run Number
ICSAB									
	Antimony	20.7	20	104	80 - 120%	6020	3/24/2014	17:23	032414A
	Arsenic	20.9	20	104	80 - 120%	6020	3/24/2014	17:23	032414A
	Beryllium	10.200	10	102	80 - 120%	6020	3/24/2014	17:23	032414A
	Cadmium	8.2	8	102	80 - 120%	6020	3/24/2014	17:23	032414A
	Chromium	21.8	20	109	80 - 120%	6020	3/24/2014	17:23	032414A
	Lead	10.1	10	101	80 - 120%	6020	3/24/2014	17:23	032414A
	Manganese	41.6	40	104	80 - 120%	6020	3/24/2014	17:23	032414A
	Molybdenum	1110.0	1040	107	80 - 120%	6020	3/24/2014	17:23	032414A
	Selenium	39.3	40	98	80 - 120%	6020	3/24/2014	17:23	032414A
	Thallium	4.0	4	100	80 - 120%	6020	3/24/2014	17:23	032414A

Total Metals
- 5a -
MATRIX SPIKE SUMMARY

Client: Beazer East, Inc. Level: LOW SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Matrix: WATER Sample ID: J1402025-003 Client ID: GAIN-HG-24S-031814S

Percent Solids for Sample: 0.00 Spiked ID: J1402025-003S Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Mercury	ug/L	75 - 125	1.23		0.01	U	1.25	98		7470A

Total Metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

Client: Beazer East, Inc. Level: LOW SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Matrix: WATER Sample ID: J1402025-003 Client ID: GAIN-HG-24S-031814SD

Percent Solids for Sample: 0.00 Spiked ID: J1402025-003SD Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Mercury	ug/L	75 - 125	1.23		0.01	U	1.25	98		7470A

Total Metals

- 5a -

MATRIX SPIKE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-007 **Client ID:** GAIN-HG-22D-031914S

Percent Solids for Sample: 0.00 **Spiked ID:** J1402025-007S **Percent Solids for Spike Sample:** 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Aluminum	ug/L	75 - 125	5380.000		165.000		5000	104		6010B
Iron	ug/L	75 - 125	6100.000		927.000		5000	103		6010B
Lithium	ug/L	75 - 125	5130.0000		10.0000	U	5000	103		6010B
Sodium	ug/L	75 - 125	28700.000		2810.000		25000	104		6010B

Total Metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

Client: Beazer East, Inc. Level: LOW SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Matrix: WATER Sample ID: J1402025-007 Client ID: GAIN-HG-22D-031914SD

Percent Solids for Sample: 0.00 Spiked ID: J1402025-007SD Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Aluminum	ug/L	75 - 125	5270.000		165.000		5000	102		6010B
Iron	ug/L	75 - 125	6090.000		927.000		5000	103		6010B
Lithium	ug/L	75 - 125	5140.0000		10.0000	U	5000	103		6010B
Sodium	ug/L	75 - 125	28800.000		2810.000		25000	104		6010B

Total Metals
- 5b -

POST DIGEST SPIKE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-HG-24S-031814A

Sample ID: J1402025-003 **Spiked ID:** J1402025-003A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Mercury	ug/L	75 - 125	4.93		0.01	U	5	98		7470A

Total Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Matrix: WATER Level: LOW Client ID: GAIN-HG-22D-031914A

Sample ID: J1402025-007 Spiked ID: J1402025-007A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Aluminum	ug/L	75 - 125	5240.000		165.000		5000	102		6010B
Iron	ug/L	75 - 125	5940.000		927.000		5000	100		6010B
Lithium	ug/L	75 - 125	5210.00		10.00	U	5000	104		6010B
Sodium	ug/L	75 - 125	28800.000		2810.000		25000	104		6010B

Total Metals
- 6 -
DUPLICATE SAMPLE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-007S **Client ID:** GAIN-HG-22D-031914SD

Percent Solids for Sample: 0.00 **Duplicate ID:** J1402025-007SD **Percent Solids for Duplicate:** 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	Method
Aluminum	ug/L	0 - 30	5380.000		5270.000		2		6010B
Iron	ug/L	0 - 30	6100.000		6090.000		0		6010B
Lithium	ug/L	0 - 30	5130.0000		5140.0000		0.2		6010B
Sodium	ug/L	0 - 30	28700.000		28800.000		0		6010B

Total Metals
- 6 -
DUPLICATE SAMPLE SUMMARY

Client: Beazer East, Inc. Level: LOW SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Matrix: WATER Sample ID: J1402025-003S Client ID: GAIN-HG-24S-031814SD

Percent Solids for Sample: 0.00 Duplicate ID: J1402025-003SD Percent Solids for Duplicate: 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	Method
Mercury	ug/L	0 - 30	1.23		1.23		0		7470A

Total Metals
- 7 -
LABORATORY CONTROL SAMPLE SUMMARY

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Aqueous LCS Source: High Purity STDs Solid LCS Source:

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	Method
LCS-02131-01								
	Aluminum	ug/L	5000	5020		100	80.0 - 120.0	6010B
	Iron	ug/L	5000	5030		101	80.0 - 120.0	6010B
	Lithium	ug/L	5000	5050		101	80.0 - 120.0	6010B
	Sodium	ug/L	25000	25400		102	80.0 - 120.0	6010B

Total Metals
- 7 -
LABORATORY CONTROL SAMPLE SUMMARY

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	Method
LCS-02134-03								
	Antimony	ug/L	50	51.7		103	80.0 - 120.0	6020
	Arsenic	ug/L	50	52.0		104	80.0 - 120.0	6020
	Beryllium	ug/L	25	26.5		106	80.0 - 120.0	6020
	Cadmium	ug/L	20	21.2		106	80.0 - 120.0	6020
	Chromium	ug/L	50	52.0		104	80.0 - 120.0	6020
	Lead	ug/L	25	26.6		106	80.0 - 120.0	6020
	Manganese	ug/L	100	105.0		105	80.0 - 120.0	6020
	Molybdenum	ug/L	100	104.0		104	80.0 - 120.0	6020
	Selenium	ug/L	100	103.0		103	80.0 - 120.0	6020
	Thallium	ug/L	10	10.3		103	80.0 - 120.0	6020

Total Metals
- 7 -
LABORATORY CONTROL SAMPLE SUMMARY

Client: Beazer East, Inc.   SDG No.: J1402025

Contract: OM-0450-14   Lab Code: ALJCK   Case No.:   SAS No.:

Aqueous LCS Source: Inorganic Ventures   Solid LCS Source:

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	Method
LCS-02159-01								
	Mercury	ug/L	1.25	1.22		98	80.0 - 120.0	7470A

Total Metals

- 9 -

SERIAL DILUTION SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-HG-22D-031914L

Sample ID: **J1402025-007** **Serial Dilution ID:** **J1402025-007L**

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	Method
Aluminum	165.000		101.000	I	38.8		10.00 %	6010B
Iron	927.000		1140.000		23.0	E	10.00 %	6010B
Lithium	10.000	U	10.000	U			10.00 %	6010B
Sodium	2809.000		2961.000		5.4		10.00 %	6010B

Total Metals

- 9 -

SERIAL DILUTION SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-HG-24S-031814L

Sample ID: J1402025-003 **Serial Dilution ID:** J1402025-003L

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	Method
Mercury	0.01	U	0.01	U			10.00 %	7470A

Total Metals
- 10 -
METHOD DETECTION LIMITS

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Analyte	Wave- length (nm)	MDL ug/L	MRL ug/L
Cetac Hg Analyzer			**Date:** 1/11/2012
Mercury	253.70	0.012	0.100
ICP-MS			**Date:** 1/20/2012
Antimony	123	0.16	1.00
Arsenic	75	0.42	1.00
Beryllium	9	0.032	0.50
Cadmium	114	0.09	0.40
Chromium	52	0.18	1.00
Lead	208	0.12	0.50
Manganese	55	0.12	2.00
Molybdenum	98	0.28	2.00
Selenium	82	1.10	2.00
Thallium	205	0.050	0.20
PE Optima ICP			**Date:** 2/3/2012
Aluminum	308.215	11.00	100.00
Iron	273.955	2.50	100.00
Lithium	610.784	10.00	100.00
Sodium	589.592	29.00	500.00

Total Metals

- 12 -

LINEAR RANGES

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Instrument ID: ICP-MS Date: 12/31/2013

Analyte	Integration Time (sec)	LDR ug/L
Antimony	15.00	5000
Arsenic	15.00	5000
Beryllium	15.00	3000
Cadmium	15.00	2500
Chromium	15.00	5000
Lead	15.00	5000
Manganese	15.00	5000
Molybdenum	15.00	5000
Selenium	15.00	5000
Thallium	15.00	5000

Total Metals
- 12 -
LINEAR RANGES

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Instrument ID: PE Optima ICP **Date:** 12/31/2013

Analyte	Integration Time (sec)	LDR ug/L
Aluminum	5.00	1000000
Iron	5.00	1200000
Lithium	5.00	50000
Sodium	5.00	500000

Total Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Beazer East, Inc.

SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK

Method: P

Case No.: SAS No.:

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	204592						
MB-02131-02	MB-02131-02	MB	WATER	3/21/14	50.0	50.0	
LCS-02131-01	LCS-02131-01	LCS	WATER	3/21/14	50.0	50.0	
J1402025-001	GAIN-M-25A-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-002	GAIN-M-36B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-003	GAIN-HG-24S-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-004	GAIN-M-25B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-005	GAIN-HG-33S-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-006	GAIN-HG-34S-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-007	GAIN-HG-22D-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-007S	GAIN-HG-22D-031914S	MS	WATER	3/21/14	50.0	50.0	
J1402025-007SD	GAIN-HG-22D-031914SD	MSD	WATER	3/21/14	50.0	50.0	

Total Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Method: MS

Case No.: SAS No.:

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	204596						
MB-02134-04	MB-02134-04	MB	WATER	3/21/14	50.0	50.0	
LCS-02134-03	LCS-02134-03	LCS	WATER	3/21/14	50.0	50.0	
J1402025-001	GAIN-M-25A-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-002	GAIN-M-36B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-003	GAIN-HG-24S-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-004	GAIN-M-25B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-005	GAIN-HG-33S-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-006	GAIN-HG-34S-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-007	GAIN-HG-22D-031914	SAM	WATER	3/21/14	50.0	50.0	

Total Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Beazer East, Inc.
SDG No.: J1402025
Contract: OM-0450-14
Lab Code: ALJCK
Method: CV
Case No.:
SAS No.:

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	204622						
MB-02159-02	MB-02159-02	MB	WATER	3/21/14	40.0	40.0	
LCS-02159-01	LCS-02159-01	LCS	WATER	3/21/14	40.0	40.0	
J1402025-001	GAIN-M-25A-031814	SAM	WATER	3/21/14	40.0	40.0	
J1402025-002	GAIN-M-36B-031814	SAM	WATER	3/21/14	40.0	40.0	
J1402025-003	GAIN-HG-24S-031814	SAM	WATER	3/21/14	40.0	40.0	
J1402025-003S	GAIN-HG-24S-031814S	MS	WATER	3/21/14	40.0	40.0	
J1402025-003SD	GAIN-HG-24S-031814SD	MSD	WATER	3/21/14	40.0	40.0	
J1402025-004	GAIN-M-25B-031814	SAM	WATER	3/21/14	40.0	40.0	
J1402025-005	GAIN-HG-33S-031914	SAM	WATER	3/21/14	40.0	40.0	
J1402025-006	GAIN-HG-34S-031914	SAM	WATER	3/21/14	40.0	40.0	
J1402025-007	GAIN-HG-22D-031914	SAM	WATER	3/21/14	40.0	40.0	

Total Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
CALIB BLANK	1.00	1741		X										X									X					*
CALIB STD 1	1.00	1746		X										X									X					*
CALIB STD 2	1.00	1751		X										X									X					*
CALIB STD 3	1.00	1755		X										X									X					*
CALIB STD 4	1.00	1758		X										X									X					*
ICV	1.00	1801		X										X									X					*
ICB	1.00	1805		X										X									X					*
ZZZZZZ	1.00	1810																										
MRL	1.00	1815		X										X									X					*
ICSA	1.00	1819		X										X									X					*
ICSAB	1.00	1827		X										X									X					*
CCV	1.00	1835		X										X									X					*
CCB	1.00	1839		X										X									X					*
ZZZZZZ	2.00	1844																										
ZZZZZZ	5.00	1852																										
ZZZZZZ	2.00	1857																										
MB-02131-02	1.00	1905		X										X									X					*
LCS-02131-01	1.00	1910		X										X									X					*
ZZZZZZ	1.00	1914																										
ZZZZZZ	1.00	1923																										
ZZZZZZ	1.00	1928																										
ZZZZZZ	1.00	1933																										
ZZZZZZ	1.00	1938																										
CCV	1.00	1942		X										X									X					*
CCB	1.00	1946		X										X									X					*
ZZZZZZ	1.00	1951																										
ZZZZZZ	1.00	1955																										
ZZZZZZ	1.00	2000																										
ZZZZZZ	1.00	2005																										
ZZZZZZ	1.00	2010																										
ZZZZZZ	1.00	2015																										
ZZZZZZ	1.00	2019																										
GAIN-M-25A-031814	1.00	2024		X										X									X					*
GAIN-M-36B-031814	1.00	2029		X										X									X					*
GAIN-HG-24S-031814	1.00	2034		X										X									X					*
CCV	1.00	2038		X										X									X					*

Total Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
CCB	1.00	2042		X										X									X					*
GAIN-M-25B-031814	1.00	2047		X										X									X					*
GAIN-HG-33S-031914	1.00	2052		X										X									X					*
GAIN-HG-34S-031914	1.00	2057		X										X									X					*
GAIN-HG-22D-031914	1.00	2102		X										X									X					*
GAIN-HG-22D-031914S	1.00	2106		X										X									X					*
GAIN-HG-22D-031914S	1.00	2109		X										X									X					*
GAIN-HG-22D-031914L	5.00	2113		X										X									X					*
GAIN-HG-22D-031914A	1.00	2117		X										X									X					*
ZZZZZZ	1.00	2121																										
ZZZZZZ	1.00	2126																										
CCV	1.00	2130		X										X									X					*
CCB	1.00	2134		X										X									X					*
ZZZZZZ	1.00	2138																										
ZZZZZZ	1.00	2142																										
ZZZZZZ	1.00	2146																										
ZZZZZZ	1.00	2149																										
ZZZZZZ	5.00	2153																										
ZZZZZZ	1.00	2157																										
ZZZZZZ	1.00	2201																										
ZZZZZZ	1.00	2206																										
ZZZZZZ	1.00	2210																										
ZZZZZZ	1.00	2214																										
CCV	1.00	2218		X										X									X					*
CCB	1.00	2222		X										X									X					*
ZZZZZZ	1.00	2227																										
ZZZZZZ	1.00	2232																										
ZZZZZZ	1.00	2236																										
ZZZZZZ	1.00	2239																										
ZZZZZZ	5.00	2243																										
ZZZZZZ	1.00	2247																										
ZZZZZZ	1.00	2251																										
ZZZZZZ	1.00	2256																										
ZZZZZZ	1.00	2301																										
ZZZZZZ	1.00	2306																										
CCV	1.00	2311		X										X									X					*

Total Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
CCB	1.00	2314		X										X									X					*
ZZZZZZ	1.00	2319																										
ZZZZZZ	1.00	2323																										
ZZZZZZ	1.00	2327																										
ZZZZZZ	1.00	2331																										
ZZZZZZ	1.00	2335																										
ZZZZZZ	5.00	2338																										
ZZZZZZ	1.00	2343																										
ZZZZZZ	1.00	2346																										
ZZZZZZ	1.00	2351																										
ZZZZZZ	1.00	2356																										
CCV	1.00	2359		X										X									X					*
CCB	1.00	0002		X										X									X					*
ZZZZZZ	1.00	0007																										
ZZZZZZ	1.00	0013																										
ZZZZZZ	1.00	0017																										
ZZZZZZ	1.00	0022																										
ZZZZZZ	1.00	0025																										
ZZZZZZ	1.00	0030																										
ZZZZZZ	1.00	0035																										
ZZZZZZ	1.00	0038																										
ZZZZZZ	5.00	0041																										
ZZZZZZ	1.00	0046																										
CCV	1.00	0049		X										X									X					*
CCB	1.00	0053		X										X									X					*
ZZZZZZ	1.00	0057																										
ZZZZZZ	1.00	0102																										
ZZZZZZ	1.00	0107																										
ZZZZZZ	1.00	0112																										
ZZZZZZ	1.00	0117																										
ICSA	1.00	0121		X										X									X					*
ICSAB	1.00	0129		X										X									X					*
CCV	1.00	0137		X										X									X					*
CCB	1.00	0141		X										X									X					*

Total Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: ICP-MS Method: MS Run Number: 032414A

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
Cal Blank	1.00	1637			X	X		X	X		X				X		X				X			X				*
Cal 1	1.00	1643			X	X		X	X		X				X		X				X			X				*
Cal 2	1.00	1648			X	X		X	X		X				X		X				X			X				*
Cal 3	1.00	1653			X	X		X	X		X				X		X				X			X				*
Cal 4	1.00	1658			X	X		X	X		X				X		X				X			X				*
ICV	1.00	1703			X	X		X	X		X				X		X				X			X				*
ICB	1.00	1708			X	X		X	X		X				X		X				X			X				*
MRL	1.00	1713			X	X		X	X		X				X		X				X			X				*
ICSA	1.00	1718			X	X		X	X		X				X		X				X			X				*
ICSAB	1.00	1723			X	X		X	X		X				X		X				X			X				*
CCV-1	1.00	1728			X	X		X	X		X				X		X				X			X				*
CCB-1	1.00	1733			X	X		X	X		X				X		X				X			X				*
MB-02134-04	1.00	1738			X	X		X	X		X				X		X				X			X				*
LCS-02134-03	1.00	1743			X	X		X	X		X				X		X				X			X				*
ZZZZZZ	1.00	1748																										
ZZZZZZ	1.00	1753																										
ZZZZZZ	1.00	1758																										
ZZZZZZ	1.00	1803																										
GAIN-M-25A-031814	1.00	1808			X	X		X	X		X				X		X				X			X				*
GAIN-M-36B-031814	1.00	1813			X	X		X	X		X				X		X				X			X				*
GAIN-HG-24S-031814	1.00	1818			X	X		X	X		X				X		X				X			X				*
GAIN-M-25B-031814	1.00	1823			X	X		X	X		X				X		X				X			X				*
CCV-2	1.00	1828			X	X		X	X		X				X		X				X			X				*
CCB-2	1.00	1833			X	X		X	X		X				X		X				X			X				*
GAIN-HG-33S-031914	1.00	1838			X	X		X	X		X				X		X				X			X				*
GAIN-HG-34S-031914	1.00	1843			X	X		X	X		X				X		X				X			X				*
GAIN-HG-22D-031914	1.00	1848			X	X		X	X		X				X		X				X			X				*
ZZZZZZ	1.00	1853																										
ZZZZZZ	1.00	1858																										
ZZZZZZ	1.00	1903																										
ZZZZZZ	5.00	1908																										
ZZZZZZ	1.00	1913																										
ZZZZZZ	1.00	1919																										
ZZZZZZ	1.00	1924																										
CCV-3	1.00	1929			X	X		X	X		X				X		X				X			X				*
CCB-3	1.00	1934			X	X		X	X		X				X		X				X			X				*

Total Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: ICP-MS Method: MS Run Number: 032414A

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
ZZZZZZ	1.00	1939																										
ZZZZZZ	1.00	1944																										
ZZZZZZ	1.00	1949																										
ZZZZZZ	1.00	1954																										
ZZZZZZ	1.00	1959																										
ZZZZZZ	1.00	2004																										
ZZZZZZ	1.00	2009																										
ZZZZZZ	1.00	2014																										
ZZZZZZ	1.00	2019																										
ZZZZZZ	1.00	2024																										
CCV-4	1.00	2029			X	X		X	X		X				X		X				X			X				*
CCB-4	1.00	2034			X	X		X	X		X				X		X				X			X				*

Total Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc.   Contract: OM-0450-14

Lab Code: ALJCK   Case No.:   SAS No.:   SDG No.: J1402025

Instrument ID Number: Cetac Hg Analyzer   Method: CV   Run Number: 032414C

Start Date: 3/24/2014   End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Calibration Blank	1.00	1910																X									
Standard #1	1.00	1911																X									
Standard #2	1.00	1912																X									
Standard #3	1.00	1914																X									
Standard #4	1.00	1916																X									
Standard #5	1.00	1917																X									
Standard #6	1.00	1919																X									
ICV	1.00	1922																X									
ICB	1.00	1924																X									
MRL 0.1	1.00	1925																X									
MB-02159-02	1.00	1926																X									
LCS-02159-01	1.00	1927																X									
ZZZZZZ	1.00	1929																									
ZZZZZZ	1.00	1930																									
ZZZZZZ	1.00	1931																									
ZZZZZZ	1.00	1932																									
GAIN-M-25A-031814	1.00	1933																X									
GAIN-M-36B-031814	1.00	1935																X									
GAIN-HG-24S-031814	1.00	1936																X									
GAIN-HG-24S-031814S	1.00	1937																X									
CCV-1	1.00	1939																X									
CCB-1	1.00	1941																X									
GAIN-HG-24S-031814S	1.00	1942																X									
GAIN-HG-24S-031814A	1.00	1943																X									
GAIN-HG-24S-031814L	5.00	1945																X									
GAIN-M-25B-031814	1.00	1947																X									
GAIN-HG-33S-031914	1.00	1948																X									
GAIN-HG-34S-031914	1.00	1949																X									
GAIN-HG-22D-031914	1.00	1950																X									
ZZZZZZ	1.00	1951																									
ZZZZZZ	1.00	1952																									
ZZZZZZ	1.00	1953																									
CCV-2	1.00	1954																X									
CCB-2	1.00	1956																X									
ZZZZZZ	1.00	1958																									
ZZZZZZ	1.00	1959																									

Total Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: Cetac Hg Analyzer Method: CV Run Number: 032414C

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	2000																									
ZZZZZZ	1.00	2001																									
ZZZZZZ	1.00	2002																									
ZZZZZZ	1.00	2003																									
CCV-3	1.00	2004																X									
CCB-3	1.00	2006																X									

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN								
CALIB BLANK	1.00	17:41				X																					
CALIB STD 1	1.00	17:46				X																					
CALIB STD 2	1.00	17:51				X																					
CALIB STD 3	1.00	17:55				X																					
CALIB STD 4	1.00	17:58				X																					
ICV	1.00	18:01				X																					
ICB	1.00	18:05				X																					
ZZZZZZ	1.00	18:10																									
MRL	1.00	18:15				X																					
ICSA	1.00	18:19				X																					
ICSAB	1.00	18:27				X																					
CCV	1.00	18:35				X																					
CCB	1.00	18:39				X																					
ZZZZZZ	2.00	18:44																									
ZZZZZZ	5.00	18:52																									
ZZZZZZ	2.00	18:57																									
MB-02131-02	1.00	19:05				X																					
LCS-02131-01	1.00	19:10				X																					
ZZZZZZ	1.00	19:14																									
ZZZZZZ	1.00	19:23																									
ZZZZZZ	1.00	19:28																									
ZZZZZZ	1.00	19:33																									
ZZZZZZ	1.00	19:38																									
CCV	1.00	19:42				X																					
CCB	1.00	19:46				X																					
ZZZZZZ	1.00	19:51																									
ZZZZZZ	1.00	19:55																									
ZZZZZZ	1.00	20:00																									
ZZZZZZ	1.00	20:05																									
ZZZZZZ	1.00	20:10																									
ZZZZZZ	1.00	20:15																									
ZZZZZZ	1.00	20:19																									

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes															
				B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN
GAIN-M-25A-031814	1.00	20:24				X													
GAIN-M-36B-031814	1.00	20:29				X													
GAIN-HG-24S-031814	1.00	20:34				X													
CCV	1.00	20:38				X													
CCB	1.00	20:42				X													
GAIN-M-25B-031814	1.00	20:47				X													
GAIN-HG-33S-031914	1.00	20:52				X													
GAIN-HG-34S-031914	1.00	20:57				X													
GAIN-HG-22D-031914	1.00	21:02				X													
GAIN-HG-22D-031914	1.00	21:06				X													
GAIN-HG-22D-031914	1.00	21:09				X													
GAIN-HG-22D-031914	5.00	21:13				X													
GAIN-HG-22D-031914	1.00	21:17				X													
ZZZZZZ	1.00	21:21																	
ZZZZZZ	1.00	21:26																	
CCV	1.00	21:30				X													
CCB	1.00	21:34				X													
ZZZZZZ	1.00	21:38																	
ZZZZZZ	1.00	21:42																	
ZZZZZZ	1.00	21:46																	
ZZZZZZ	1.00	21:49																	
ZZZZZZ	5.00	21:53																	
ZZZZZZ	1.00	21:57																	
ZZZZZZ	1.00	22:01																	
ZZZZZZ	1.00	22:06																	
ZZZZZZ	1.00	22:10																	
ZZZZZZ	1.00	22:14																	
CCV	1.00	22:18				X													
CCB	1.00	22:22				X													
ZZZZZZ	1.00	22:27																	
ZZZZZZ	1.00	22:32																	
ZZZZZZ	1.00	22:36																	

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN								
ZZZZZZ	1.00	22:39																									
ZZZZZZ	5.00	22:43																									
ZZZZZZ	1.00	22:47																									
ZZZZZZ	1.00	22:51																									
ZZZZZZ	1.00	22:56																									
ZZZZZZ	1.00	23:01																									
ZZZZZZ	1.00	23:06																									
CCV	1.00	23:11				X																					
CCB	1.00	23:14				X																					
ZZZZZZ	1.00	23:19																									
ZZZZZZ	1.00	23:23																									
ZZZZZZ	1.00	23:27																									
ZZZZZZ	1.00	23:31																									
ZZZZZZ	1.00	23:35																									
ZZZZZZ	5.00	23:38																									
ZZZZZZ	1.00	23:43																									
ZZZZZZ	1.00	23:46																									
ZZZZZZ	1.00	23:51																									
ZZZZZZ	1.00	23:56																									
CCV	1.00	23:59				X																					
CCB	1.00	00:02				X																					
ZZZZZZ	1.00	00:07																									
ZZZZZZ	1.00	00:13																									
ZZZZZZ	1.00	00:17																									
ZZZZZZ	1.00	00:22																									
ZZZZZZ	1.00	00:25																									
ZZZZZZ	1.00	00:30																									
ZZZZZZ	1.00	00:35																									
ZZZZZZ	1.00	00:38																									
ZZZZZZ	5.00	00:41																									
ZZZZZZ	1.00	00:46																									
CCV	1.00	00:49				X																					

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN								
CCB	1.00	00:53				X																					
ZZZZZZ	1.00	00:57																									
ZZZZZZ	1.00	01:02																									
ZZZZZZ	1.00	01:07																									
ZZZZZZ	1.00	01:12																									
ZZZZZZ	1.00	01:17																									
ICSA	1.00	01:21				X																					
ICSAB	1.00	01:29				X																					
CCV	1.00	01:37				X																					
CCB	1.00	01:41				X																					

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: ICP-MS Method: MS Run Number: 032414A

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN								
Cal Blank	1.00	16:37					X																				
Cal 1	1.00	16:43					X																				
Cal 2	1.00	16:48					X																				
Cal 3	1.00	16:53					X																				
Cal 4	1.00	16:58					X																				
ICV	1.00	17:03					X																				
ICB	1.00	17:08					X																				
MRL	1.00	17:13					X																				
ICSA	1.00	17:18					X																				
ICSAB	1.00	17:23					X																				
CCV-1	1.00	17:28					X																				
CCB-1	1.00	17:33					X																				
MB-02134-04	1.00	17:38					X																				
LCS-02134-03	1.00	17:43					X																				
ZZZZZZ	1.00	17:48																									
ZZZZZZ	1.00	17:53																									
ZZZZZZ	1.00	17:58																									
ZZZZZZ	1.00	18:03																									
GAIN-M-25A-031814	1.00	18:08					X																				
GAIN-M-36B-031814	1.00	18:13					X																				
GAIN-HG-24S-031814	1.00	18:18					X																				
GAIN-M-25B-031814	1.00	18:23					X																				
CCV-2	1.00	18:28					X																				
CCB-2	1.00	18:33					X																				
GAIN-HG-33S-031914	1.00	18:38					X																				
GAIN-HG-34S-031914	1.00	18:43					X																				
GAIN-HG-22D-031914	1.00	18:48					X																				
ZZZZZZ	1.00	18:53																									
ZZZZZZ	1.00	18:58																									
ZZZZZZ	1.00	19:03																									
ZZZZZZ	5.00	19:08																									
ZZZZZZ	1.00	19:13																									

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: ICP-MS Method: MS Run Number: 032414A

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN								
ZZZZZZ	1.00	19:19																									
ZZZZZZ	1.00	19:24																									
CCV-3	1.00	19:29					X																				
CCB-3	1.00	19:34					X																				
ZZZZZZ	1.00	19:39																									
ZZZZZZ	1.00	19:44																									
ZZZZZZ	1.00	19:49																									
ZZZZZZ	1.00	19:54																									
ZZZZZZ	1.00	19:59																									
ZZZZZZ	1.00	20:04																									
ZZZZZZ	1.00	20:09																									
ZZZZZZ	1.00	20:14																									
ZZZZZZ	1.00	20:19																									
ZZZZZZ	1.00	20:24																									
CCV-4	1.00	20:29					X																				
CCB-4	1.00	20:34					X																				

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: Cetac Hg Analyzer Method: CV Run Number: 032414C

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN								
Calibration Blank	1.00	19:10																									
Standard #1	1.00	19:11																									
Standard #2	1.00	19:12																									
Standard #3	1.00	19:14																									
Standard #4	1.00	19:16																									
Standard #5	1.00	19:17																									
Standard #6	1.00	19:19																									
ICV	1.00	19:22																									
ICB	1.00	19:24																									
MRL 0.1	1.00	19:25																									
MB-02159-02	1.00	19:26																									
LCS-02159-01	1.00	19:27																									
ZZZZZZ	1.00	19:29																									
ZZZZZZ	1.00	19:30																									
ZZZZZZ	1.00	19:31																									
ZZZZZZ	1.00	19:32																									
GAIN-M-25A-031814	1.00	19:33																									
GAIN-M-36B-031814	1.00	19:35																									
GAIN-HG-24S-031814	1.00	19:36																									
GAIN-HG-24S-031814	1.00	19:37																									
CCV-1	1.00	19:39																									
CCB-1	1.00	19:41																									
GAIN-HG-24S-031814	1.00	19:42																									
GAIN-HG-24S-031814	1.00	19:43																									
GAIN-HG-24S-031814	5.00	19:45																									
GAIN-M-25B-031814	1.00	19:47																									
GAIN-HG-33S-031914	1.00	19:48																									
GAIN-HG-34S-031914	1.00	19:49																									
GAIN-HG-22D-031914	1.00	19:50																									
ZZZZZZ	1.00	19:51																									
ZZZZZZ	1.00	19:52																									
ZZZZZZ	1.00	19:53																									

Total Metals
-14-

ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: Cetac Hg Analyzer Method: CV Run Number: 032414C

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				B	AU	LI	MO	OS	PD	P	PT	SI	S	SN	SR	TI	U	W	IN								
CCV-2	1.00	19:54																									
CCB-2	1.00	19:56																									
ZZZZZZ	1.00	19:58																									
ZZZZZZ	1.00	19:59																									
ZZZZZZ	1.00	20:00																									
ZZZZZZ	1.00	20:01																									
ZZZZZZ	1.00	20:02																									
ZZZZZZ	1.00	20:03																									
CCV-3	1.00	20:04																									
CCB-3	1.00	20:06																									

Dissolved Metals
- COVER PAGE -
INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc.

SDG No.: J1402025 Method Type: 6010B/6020/74 SOW No.:

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Lab Sample ID	Client Sample ID	QC Description
J1402025-001	GAIN-M-25A-031814	
J1402025-001S	GAIN-M-25A-031814S	Matrix Spike
J1402025-001SD	GAIN-M-25A-031814SD	Matrix Spike Duplicate
J1402025-002	GAIN-M-36B-031814	
J1402025-002S	GAIN-M-36B-031814S	Matrix Spike
J1402025-002SD	GAIN-M-36B-031814SD	Matrix Spike Duplicate
J1402025-003	GAIN-HG-24S-031814	
J1402025-004	GAIN-M-25B-031814	
J1402025-005	GAIN-HG-33S-031914	
J1402025-006	GAIN-HG-34S-031914	
J1402025-007	GAIN-HG-22D-031914	
J1402025-007S	GAIN-HG-22D-031914S	Matrix Spike
J1402025-007SD	GAIN-HG-22D-031914SD	Matrix Spike Duplicate

Were ICP interelement corrections applied? Yes/No Yes

Were ICP background corrections applied? Yes/No Yes
If yes - were raw data generated before applications of background corrections? Yes/No No

Comments: Perkin Elmer MSF program is used for IEC corrections

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Name: Craig Myers

Date: 4/8/14 Title: Project Manager

Dissolved Metals

- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-001 **Client ID:** GAIN-M-25A-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204591 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	112	ug/L			6010B	11	100	1.00	3/22/2014	00:25:55
Antimony	1.6	ug/L			6020	0.160	1.0	1.00	3/27/2014	00:13
Arsenic	0.51	ug/L	i		6020	0.42	1.0	1.00	3/27/2014	00:13
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/27/2014	00:13
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/27/2014	00:13
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/27/2014	00:13
Iron	2.5	ug/L	U		6010B	2.5	100	1.00	3/22/2014	00:25:55
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/27/2014	00:13
Manganese	0.4	ug/L	i		6020	0.1	2.0	1.00	3/27/2014	00:13
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	17:01:52
Molybdenum	2.70	ug/L			6020	0.28	2.00	1.00	3/27/2014	00:13
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/27/2014	00:13
Sodium	1590	ug/L			6010B	29	500	1.00	3/22/2014	00:25:55
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/27/2014	00:13

Comments:

Dissolved Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-002 **Client ID:** GAIN-M-36B-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204591 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	110	ug/L			6010B	11	100	1.00	3/22/2014	00:30:47
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/27/2014	00:18
Arsenic	0.42	ug/L	U		6020	0.42	1.0	1.00	3/27/2014	00:18
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/27/2014	00:18
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/27/2014	00:18
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/27/2014	00:18
Iron	753	ug/L			6010B	2.5	100	1.00	3/22/2014	00:30:47
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/27/2014	00:18
Manganese	27	ug/L			6020	0.1	2.0	1.00	3/27/2014	00:18
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	17:09:33
Molybdenum	2.20	ug/L			6020	0.28	2.00	1.00	3/27/2014	00:18
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/27/2014	00:18
Sodium	6770	ug/L			6010B	29	500	1.00	3/22/2014	00:30:47
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/27/2014	00:18

Comments:

Dissolved Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-003

Client ID: GAIN-HG-24S-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204591 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	96	ug/L	I		6010B	11	100	1.00	3/22/2014	00:57:58
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/27/2014	00:23
Arsenic	2.4	ug/L			6020	0.42	1.0	1.00	3/27/2014	00:23
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/27/2014	00:23
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/27/2014	00:23
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/27/2014	00:23
Iron	744	ug/L			6010B	2.5	100	1.00	3/22/2014	00:57:58
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/27/2014	00:23
Manganese	27	ug/L			6020	0.1	2.0	1.00	3/27/2014	00:23
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	17:10:42
Molybdenum	5.80	ug/L			6020	0.28	2.00	1.00	3/27/2014	00:23
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/27/2014	00:23
Sodium	5490	ug/L			6010B	29	500	1.00	3/22/2014	00:57:58
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/27/2014	00:23

Comments:

Dissolved Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-004 **Client ID:** GAIN-M-25B-031814

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204591 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	95	ug/L	I		6010B	11	100	1.00	3/22/2014	01:02:51
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/27/2014	00:28
Arsenic	3.2	ug/L			6020	0.42	1.0	1.00	3/27/2014	00:28
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/27/2014	00:28
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/27/2014	00:28
Chromium	0.45	ug/L	i		6020	0.18	1.0	1.00	3/27/2014	00:28
Iron	245	ug/L			6010B	2.5	100	1.00	3/22/2014	01:02:51
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/27/2014	00:28
Manganese	63	ug/L			6020	0.1	2.0	1.00	3/27/2014	00:28
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	17:11:51
Molybdenum	0.28	ug/L	U		6020	0.28	2.00	1.00	3/27/2014	00:28
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/27/2014	00:28
Sodium	17500	ug/L			6010B	29	500	1.00	3/22/2014	01:02:51
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/27/2014	00:28

Comments:

Dissolved Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-005 **Client ID:** GAIN-HG-33S-031914

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204591 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	99	ug/L	I		6010B	11	100	1.00	3/22/2014	01:07:43
Antimony	0.160	ug/L	U		6020	0.160	1.0	1.00	3/27/2014	00:43
Arsenic	0.42	ug/L	U		6020	0.42	1.0	1.00	3/27/2014	00:43
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/27/2014	00:43
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/27/2014	00:43
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/27/2014	00:43
Iron	887	ug/L			6010B	2.5	100	1.00	3/22/2014	01:07:43
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/27/2014	00:43
Manganese	27	ug/L			6020	0.1	2.0	1.00	3/27/2014	00:43
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	17:16:12
Molybdenum	1.90	ug/L	i		6020	0.28	2.00	1.00	3/27/2014	00:43
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/27/2014	00:43
Sodium	6720	ug/L			6010B	29	500	1.00	3/22/2014	01:07:43
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/27/2014	00:43

Comments:

Dissolved Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-006 **Client ID:** GAIN-HG-34S-031914

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204591 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	470	ug/L			6010B	11	100	1.00	3/22/2014	01:12:37
Antimony	0.250	ug/L	i		6020	0.160	1.0	1.00	3/27/2014	00:49
Arsenic	0.53	ug/L	i		6020	0.42	1.0	1.00	3/27/2014	00:49
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/27/2014	00:49
Cadmium	0.090	ug/L	U		6020	0.090	0.400	1.00	3/27/2014	00:49
Chromium	0.18	ug/L	U		6020	0.18	1.0	1.00	3/27/2014	00:49
Iron	5.4	ug/L	I		6010B	2.5	100	1.00	3/22/2014	01:12:37
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/27/2014	00:49
Manganese	0.3	ug/L	i		6020	0.1	2.0	1.00	3/27/2014	00:49
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	17:17:22
Molybdenum	8.00	ug/L			6020	0.28	2.00	1.00	3/27/2014	00:49
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/27/2014	00:49
Sodium	11000	ug/L			6010B	29	500	1.00	3/22/2014	01:12:37
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/27/2014	00:49

Comments:

Dissolved Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Beazer East, Inc. **SDG No.:** J1402025 **Method Type:**

Sample ID: J1402025-007

Client ID: GAIN-HG-22D-031914

Matrix: WATER **Date Received:** 3/19/2014 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: 204591 **Prep Date:** 3/21/2014

Analyte	Concentration	Units	C	Qual	Method	MDL	MRL	Dil	Analytical Date	Analytical Time
Aluminum	120	ug/L			6010B	11	100	1.00	3/22/2014	01:17:29
Antimony	0.380	ug/L	i		6020	0.160	1.0	1.00	3/28/2014	14:23
Arsenic	0.62	ug/L	i		6020	0.42	1.0	1.00	3/28/2014	14:23
Beryllium	0.032	ug/L	U		6020	0.032	0.500	1.00	3/28/2014	14:23
Cadmium	0.570	ug/L			6020	0.090	0.400	1.00	3/28/2014	14:23
Chromium	0.55	ug/L	i		6020	0.18	1.0	1.00	3/28/2014	14:23
Iron	340	ug/L			6010B	2.5	100	1.00	3/22/2014	01:17:29
Lead	0.12	ug/L	U		6020	0.12	0.50	1.00	3/28/2014	14:23
Manganese	11	ug/L			6020	0.1	2.0	1.00	3/28/2014	14:23
Mercury	0.012	ug/L	U		7470A	0.012	0.10	1.00	3/24/2014	17:18:29
Molybdenum	1.80	ug/L	i		6020	0.28	2.00	1.00	3/28/2014	14:23
Selenium	1.1	ug/L	U		6020	1.1	2.0	1.00	3/28/2014	14:23
Sodium	2740	ug/L			6010B	29	500	1.00	3/22/2014	01:17:29
Thallium	0.05	ug/L	U		6020	0.05	0.20	1.00	3/28/2014	14:23

Comments:

Dissolved Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: High Purity STDs

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
ICV									
	Aluminum	50100.00	50000.0	100	90.0 - 110.0	6010B	3/21/2014	18:01	032114A1
	Iron	39200.0	40000.0	98	90.0 - 110.0	6010B	3/21/2014	18:01	032114A1
	Sodium	20600.00	20000.0	103	90.0 - 110.0	6010B	3/21/2014	18:01	032114A1
CCV									
	Aluminum	4980.00	5000.0	100	90.0 - 110.0	6010B	3/21/2014	18:35	032114A1
	Iron	5080.0	5000.0	102	90.0 - 110.0	6010B	3/21/2014	18:35	032114A1
	Sodium	25100.00	25000.0	100	90.0 - 110.0	6010B	3/21/2014	18:35	032114A1
CCV									
	Aluminum	4900.00	5000.0	98	90.0 - 110.0	6010B	3/21/2014	19:42	032114A1
	Iron	4980.0	5000.0	100	90.0 - 110.0	6010B	3/21/2014	19:42	032114A1
	Sodium	25200.00	25000.0	101	90.0 - 110.0	6010B	3/21/2014	19:42	032114A1
CCV									
	Aluminum	4890.00	5000.0	98	90.0 - 110.0	6010B	3/21/2014	20:38	032114A1
	Iron	4980.0	5000.0	100	90.0 - 110.0	6010B	3/21/2014	20:38	032114A1
	Sodium	25200.00	25000.0	101	90.0 - 110.0	6010B	3/21/2014	20:38	032114A1
CCV									
	Aluminum	5010.00	5000.0	100	90.0 - 110.0	6010B	3/21/2014	21:30	032114A1
	Iron	5060.0	5000.0	101	90.0 - 110.0	6010B	3/21/2014	21:30	032114A1
	Sodium	25300.00	25000.0	101	90.0 - 110.0	6010B	3/21/2014	21:30	032114A1
CCV									
	Aluminum	4890.00	5000.0	98	90.0 - 110.0	6010B	3/21/2014	22:18	032114A1
	Iron	4900.0	5000.0	98	90.0 - 110.0	6010B	3/21/2014	22:18	032114A1
	Sodium	25400.00	25000.0	102	90.0 - 110.0	6010B	3/21/2014	22:18	032114A1
CCV									
	Aluminum	4900.00	5000.0	98	90.0 - 110.0	6010B	3/21/2014	23:11	032114A1
	Iron	4930.0	5000.0	99	90.0 - 110.0	6010B	3/21/2014	23:11	032114A1
	Sodium	25400.00	25000.0	102	90.0 - 110.0	6010B	3/21/2014	23:11	032114A1

Dissolved Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: High Purity STDs

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
CCV									
	Aluminum	4930.00	5000.0	99	90.0 - 110.0	6010B	3/21/2014	23:59	032114A1
	Iron	4950.0	5000.0	99	90.0 - 110.0	6010B	3/21/2014	23:59	032114A1
	Sodium	25400.00	25000.0	102	90.0 - 110.0	6010B	3/21/2014	23:59	032114A1
CCV									
	Aluminum	4960.00	5000.0	99	90.0 - 110.0	6010B	3/22/2014	00:49	032114A1
	Iron	4990.0	5000.0	100	90.0 - 110.0	6010B	3/22/2014	00:49	032114A1
	Sodium	25400.00	25000.0	102	90.0 - 110.0	6010B	3/22/2014	00:49	032114A1
CCV									
	Aluminum	4980.00	5000.0	100	90.0 - 110.0	6010B	3/22/2014	01:37	032114A1
	Iron	4990.0	5000.0	100	90.0 - 110.0	6010B	3/22/2014	01:37	032114A1
	Sodium	25600.00	25000.0	102	90.0 - 110.0	6010B	3/22/2014	01:37	032114A1
ICV									
	Mercury	4.96	5.00	99	90.0 - 110.0	7470A	3/24/2014	16:54	032414B
CCV-1									
	Mercury	5.00	5.00	100	80.0 - 120.0	7470A	3/24/2014	17:12	032414B
CCV-2									
	Mercury	5.00	5.00	100	80.0 - 120.0	7470A	3/24/2014	17:30	032414B
CCV-3									
	Mercury	4.99	5.00	100	80.0 - 120.0	7470A	3/24/2014	17:45	032414B

Dissolved Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: High Purity Standards

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
ICV									
	Antimony	49.4	50.0	99	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Arsenic	51.2	50.0	102	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Beryllium	20.0	20.0	100	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Cadmium	23.8	25.0	95	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Chromium	48.8	50.0	98	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Lead	49.7	50.0	99	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Manganese	49.4	50.0	99	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Molybdenum	49.6	50.0	99	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Selenium	49.1	50.0	98	90.0 - 110.0	6020	3/26/2014	23:08	032614B
	Thallium	48.9	50.0	98	90.0 - 110.0	6020	3/26/2014	23:08	032614B
CCV-1									
	Antimony	50.2	50.0	100	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Arsenic	51.2	50.0	102	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Beryllium	24.6	25.0	98	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Cadmium	19.5	20.0	98	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Chromium	49.5	50.0	99	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Lead	26.1	25.0	104	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Manganese	101.0	100.0	101	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Molybdenum	103.0	100.0	103	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Selenium	101.0	100.0	101	90.0 - 110.0	6020	3/26/2014	23:33	032614B
	Thallium	10.3	10.0	103	90.0 - 110.0	6020	3/26/2014	23:33	032614B
CCV-2									
	Antimony	49.2	50.0	98	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Arsenic	51.2	50.0	102	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Beryllium	25.9	25.0	104	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Cadmium	19.1	20.0	96	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Chromium	48.8	50.0	98	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Lead	26.0	25.0	104	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Manganese	101.0	100.0	101	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Molybdenum	99.9	100.0	100	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Selenium	101.0	100.0	101	90.0 - 110.0	6020	3/27/2014	00:33	032614B
	Thallium	10.1	10.0	101	90.0 - 110.0	6020	3/27/2014	00:33	032614B

Dissolved Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: High Purity Standards

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
CCV-3									
	Antimony	48.7	50.0	97	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Arsenic	52.3	50.0	105	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Beryllium	24.3	25.0	97	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Cadmium	19.3	20.0	96	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Chromium	49.7	50.0	99	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Lead	26.1	25.0	104	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Manganese	101.0	100.0	101	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Molybdenum	100.0	100.0	100	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Selenium	103.0	100.0	103	90.0 - 110.0	6020	3/27/2014	01:34	032614B
	Thallium	10.3	10.0	103	90.0 - 110.0	6020	3/27/2014	01:34	032614B
CCV-4									
	Antimony	48.0	50.0	96	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Arsenic	49.8	50.0	100	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Beryllium	24.2	25.0	97	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Cadmium	18.8	20.0	94	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Chromium	47.5	50.0	95	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Lead	25.4	25.0	102	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Manganese	98.4	100.0	98	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Molybdenum	97.3	100.0	97	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Selenium	99.4	100.0	99	90.0 - 110.0	6020	3/27/2014	01:54	032614B
	Thallium	10.1	10.0	101	90.0 - 110.0	6020	3/27/2014	01:54	032614B
ICV									
	Antimony	50.4	50.0	101	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Arsenic	50.5	50.0	101	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Beryllium	18.7	20.0	94	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Cadmium	25.4	25.0	102	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Chromium	50.2	50.0	100	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Lead	48.3	50.0	97	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Manganese	49.7	50.0	99	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Molybdenum	50.9	50.0	102	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Selenium	50.4	50.0	101	90.0 - 110.0	6020	3/28/2014	13:37	032814A
	Thallium	48.7	50.0	97	90.0 - 110.0	6020	3/28/2014	13:37	032814A

Dissolved Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Initial Calibration Source: High Purity Standards

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	Method	Analysis Date	Analysis Time	Run Number
CCV-1									
	Antimony	50.5	50.0	101	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Arsenic	50.7	50.0	101	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Beryllium	24.1	25.0	96	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Cadmium	21.1	20.0	106	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Chromium	50.6	50.0	101	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Lead	24.8	25.0	99	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Manganese	101.0	100.0	101	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Molybdenum	104.0	100.0	104	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Selenium	101.0	100.0	101	90.0 - 110.0	6020	3/28/2014	14:02	032814A
	Thallium	10.3	10.0	103	90.0 - 110.0	6020	3/28/2014	14:02	032814A
CCV-2									
	Antimony	51.5	50.0	103	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Arsenic	50.0	50.0	100	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Beryllium	25.5	25.0	102	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Cadmium	20.8	20.0	104	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Chromium	50.8	50.0	102	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Lead	25.3	25.0	101	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Manganese	102.0	100.0	102	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Molybdenum	101.0	100.0	101	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Selenium	101.0	100.0	101	90.0 - 110.0	6020	3/28/2014	15:03	032814A
	Thallium	10.3	10.0	103	90.0 - 110.0	6020	3/28/2014	15:03	032814A
CCV-3									
	Antimony	50.3	50.0	101	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Arsenic	51.4	50.0	103	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Beryllium	25.0	25.0	100	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Cadmium	20.6	20.0	103	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Chromium	50.9	50.0	102	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Lead	25.3	25.0	101	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Manganese	102.0	100.0	102	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Molybdenum	100.0	100.0	100	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Selenium	102.0	100.0	102	90.0 - 110.0	6020	3/28/2014	15:38	032814A
	Thallium	10.4	10.0	104	90.0 - 110.0	6020	3/28/2014	15:38	032814A

Dissolved Metals
- 2b -
CRDL STANDARD FOR AA & ICP

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No: SAS No.:

AA CRDL Standard Source:

ICP CRDL Standard Source: High Purity STDs

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Advisory Limits (%R)	Method	Analysis Date	Analysis Time	Run Number
MRL									
	Aluminum	68.60	100.0	69	50 - 150	6010B	3/21/2014	18:15	032114A1
	Iron	106.0	100.0	106	50 - 150	6010B	3/21/2014	18:15	032114A1
	Sodium	546.00	500.0	109	50 - 150	6010B	3/21/2014	18:15	032114A1
MRL 0.1									
	Mercury	0.10	0.10	100	50 - 150	7470A	3/24/2014	16:57	032414B
MRL									
	Antimony	1.13	1.00	113	50 - 150	6020	3/26/2014	23:18	032614B
	Arsenic	1.07	1.00	107	50 - 150	6020	3/26/2014	23:18	032614B
	Beryllium	0.48	0.50	96	50 - 150	6020	3/26/2014	23:18	032614B
	Cadmium	0.38	0.40	95	50 - 150	6020	3/26/2014	23:18	032614B
	Chromium	1.12	1.00	112	50 - 150	6020	3/26/2014	23:18	032614B
	Lead	0.27	0.50	54	50 - 150	6020	3/26/2014	23:18	032614B
	Manganese	2.05	2.00	102	50 - 150	6020	3/26/2014	23:18	032614B
	Molybdenum	1.98	2.00	99	50 - 150	6020	3/26/2014	23:18	032614B
	Selenium	1.73	2.00	86	50 - 150	6020	3/26/2014	23:18	032614B
	Thallium	0.20	0.20	100	50 - 150	6020	3/26/2014	23:18	032614B
MRL									
	Antimony	1.22	1.00	122	50 - 150	6020	3/28/2014	13:47	032814A
	Arsenic	1.24	1.00	124	50 - 150	6020	3/28/2014	13:47	032814A
	Beryllium	0.50	0.50	100	50 - 150	6020	3/28/2014	13:47	032814A
	Cadmium	0.44	0.40	110	50 - 150	6020	3/28/2014	13:47	032814A
	Chromium	0.89	1.00	89	50 - 150	6020	3/28/2014	13:47	032814A
	Lead	0.52	0.50	104	50 - 150	6020	3/28/2014	13:47	032814A
	Manganese	2.04	2.00	102	50 - 150	6020	3/28/2014	13:47	032814A
	Molybdenum	2.04	2.00	102	50 - 150	6020	3/28/2014	13:47	032814A
	Selenium	1.88	2.00	94	50 - 150	6020	3/28/2014	13:47	032814A
	Thallium	0.20	0.20	100	50 - 150	6020	3/28/2014	13:47	032814A

Dissolved Metals
- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
ICB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	18:05	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	18:05	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	18:05	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	18:39	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	18:39	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	18:39	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	19:46	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	19:46	032114A1
	Sodium	35.600	+/-500.000	I	29.000	500.000	6010B	3/21/2014	19:46	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	20:42	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	20:42	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	20:42	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	21:34	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	21:34	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	21:34	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	22:22	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	22:22	032114A1
	Sodium	35.000	+/-500.000	I	29.000	500.000	6010B	3/21/2014	22:22	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/21/2014	23:14	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/21/2014	23:14	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/21/2014	23:14	032114A1

Dissolved Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/22/2014	00:02	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/22/2014	00:02	032114A1
	Sodium	29.900	+/-500.000	I	29.000	500.000	6010B	3/22/2014	00:02	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/22/2014	00:53	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/22/2014	00:53	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/22/2014	00:53	032114A1
CCB										
	Aluminum	11.000	+/-100.000	U	11.000	100.000	6010B	3/22/2014	01:41	032114A1
	Iron	2.50	+/-100.00	U	2.50	100.00	6010B	3/22/2014	01:41	032114A1
	Sodium	29.000	+/-500.000	U	29.000	500.000	6010B	3/22/2014	01:41	032114A1
ICB										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	16:56	032414B
CCB-1										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	17:15	032414B
CCB-2										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	17:32	032414B
CCB-3										
	Mercury	0.012	+/-0.100	U	0.012	0.100	7470A	3/24/2014	17:47	032414B

Dissolved Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
ICB										
	Antimony	0.54	+/-1.00	i	0.16	1.00	6020	3/26/2014	23:13	032614B
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/26/2014	23:13	032614B
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/26/2014	23:13	032614B
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/26/2014	23:13	032614B
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/26/2014	23:13	032614B
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/26/2014	23:13	032614B
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/26/2014	23:13	032614B
	Molybdenum	0.36	+/-2.00	i	0.28	2.00	6020	3/26/2014	23:13	032614B
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/26/2014	23:13	032614B
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/26/2014	23:13	032614B
CCB-1										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/26/2014	23:38	032614B
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/26/2014	23:38	032614B
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/26/2014	23:38	032614B
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/26/2014	23:38	032614B
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/26/2014	23:38	032614B
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/26/2014	23:38	032614B
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/26/2014	23:38	032614B
	Molybdenum	0.59	+/-2.00	i	0.28	2.00	6020	3/26/2014	23:38	032614B
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/26/2014	23:38	032614B
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/26/2014	23:38	032614B
CCB-2										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/27/2014	00:38	032614B
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/27/2014	00:38	032614B
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/27/2014	00:38	032614B
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/27/2014	00:38	032614B
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/27/2014	00:38	032614B
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/27/2014	00:38	032614B
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/27/2014	00:38	032614B
	Molybdenum	0.28	+/-2.00	U	0.28	2.00	6020	3/27/2014	00:38	032614B
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/27/2014	00:38	032614B
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/27/2014	00:38	032614B

Dissolved Metals
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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
CCB-3										
	Antimony	0.19	+/-1.00	i	0.16	1.00	6020	3/27/2014	01:39	032614B
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/27/2014	01:39	032614B
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/27/2014	01:39	032614B
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/27/2014	01:39	032614B
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/27/2014	01:39	032614B
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/27/2014	01:39	032614B
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/27/2014	01:39	032614B
	Molybdenum	0.30	+/-2.00	i	0.28	2.00	6020	3/27/2014	01:39	032614B
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/27/2014	01:39	032614B
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/27/2014	01:39	032614B
CCB-4										
	Antimony	0.17	+/-1.00	i	0.16	1.00	6020	3/27/2014	01:59	032614B
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/27/2014	01:59	032614B
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/27/2014	01:59	032614B
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/27/2014	01:59	032614B
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/27/2014	01:59	032614B
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/27/2014	01:59	032614B
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/27/2014	01:59	032614B
	Molybdenum	0.28	+/-2.00	i	0.28	2.00	6020	3/27/2014	01:59	032614B
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/27/2014	01:59	032614B
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/27/2014	01:59	032614B
ICB										
	Antimony	0.56	+/-1.00	i	0.16	1.00	6020	3/28/2014	13:42	032814A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/28/2014	13:42	032814A
	Beryllium	0.03	+/-0.50	i	0.03	0.50	6020	3/28/2014	13:42	032814A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/28/2014	13:42	032814A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/28/2014	13:42	032814A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/28/2014	13:42	032814A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/28/2014	13:42	032814A
	Molybdenum	0.35	+/-2.00	i	0.28	2.00	6020	3/28/2014	13:42	032814A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/28/2014	13:42	032814A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/28/2014	13:42	032814A

Dissolved Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	MRL	Method	Analysis Date	Analysis Time	Run
CCB-1										
	Antimony	0.21	+/-1.00	i	0.16	1.00	6020	3/28/2014	14:08	032814A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/28/2014	14:08	032814A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/28/2014	14:08	032814A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/28/2014	14:08	032814A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/28/2014	14:08	032814A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/28/2014	14:08	032814A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/28/2014	14:08	032814A
	Molybdenum	0.65	+/-2.00	i	0.28	2.00	6020	3/28/2014	14:08	032814A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/28/2014	14:08	032814A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/28/2014	14:08	032814A
CCB-2										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/28/2014	15:08	032814A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/28/2014	15:08	032814A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/28/2014	15:08	032814A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/28/2014	15:08	032814A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/28/2014	15:08	032814A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/28/2014	15:08	032814A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/28/2014	15:08	032814A
	Molybdenum	0.35	+/-2.00	i	0.28	2.00	6020	3/28/2014	15:08	032814A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/28/2014	15:08	032814A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/28/2014	15:08	032814A
CCB-3										
	Antimony	0.16	+/-1.00	U	0.16	1.00	6020	3/28/2014	15:43	032814A
	Arsenic	0.42	+/-1.00	U	0.42	1.00	6020	3/28/2014	15:43	032814A
	Beryllium	0.03	+/-0.50	U	0.03	0.50	6020	3/28/2014	15:43	032814A
	Cadmium	0.09	+/-0.40	U	0.09	0.40	6020	3/28/2014	15:43	032814A
	Chromium	0.18	+/-1.00	U	0.18	1.00	6020	3/28/2014	15:43	032814A
	Lead	0.12	+/-0.50	U	0.12	0.50	6020	3/28/2014	15:43	032814A
	Manganese	0.12	+/-2.00	U	0.12	2.00	6020	3/28/2014	15:43	032814A
	Molybdenum	0.52	+/-2.00	i	0.28	2.00	6020	3/28/2014	15:43	032814A
	Selenium	1.10	+/-2.00	U	1.10	2.00	6020	3/28/2014	15:43	032814A
	Thallium	0.05	+/-0.20	U	0.05	0.20	6020	3/28/2014	15:43	032814A

Dissolved Metals

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PREPARATION BLANK SUMMARY

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Sample ID	Analyte	Result (ug/L)	Conc Qual	Q	Acceptance Limit	MDL	MRL	Method	Analysis Date	Analysis Time	Run
MB-02113-02			WATER								
	Mercury	0.012	U		+/-0.012	0.012	0.100	7470A	3/24/2014	16:59	032414B
MB-02130-02			WATER								
	Aluminum	79.700	I		+/-11.000	11.000	100.000	6010B	3/22/2014	00:17	032114A1
	Iron	16.000	I		+/-2.500	2.500	100.000	6010B	3/22/2014	00:17	032114A1
	Sodium	29.000	U		+/-29.000	29.000	500.000	6010B	3/22/2014	00:17	032114A1
MB-02133-04			WATER								
	Antimony	0.250	i		+/-0.160	0.160	1.000	6020	3/26/2014	23:43	032614B
	Arsenic	0.420	U		+/-0.420	0.420	1.000	6020	3/26/2014	23:43	032614B
	Beryllium	0.032	U		+/-0.032	0.032	0.500	6020	3/26/2014	23:43	032614B
	Cadmium	0.091	U		+/-0.091	0.091	0.400	6020	3/26/2014	23:43	032614B
	Chromium	0.200	i		+/-0.180	0.180	1.000	6020	3/26/2014	23:43	032614B
	Lead	0.120	U		+/-0.120	0.120	0.500	6020	3/26/2014	23:43	032614B
	Manganese	0.120	U		+/-0.120	0.120	2.000	6020	3/26/2014	23:43	032614B
	Molybdenum	0.390	i		+/-0.280	0.280	2.000	6020	3/26/2014	23:43	032614B
	Selenium	1.100	U		+/-1.100	1.100	2.000	6020	3/26/2014	23:43	032614B
	Thallium	0.050	U		+/-0.050	0.050	0.200	6020	3/26/2014	23:43	032614B
MB-02258-02			WATER								
	Antimony	0.160	U		+/-0.160	0.160	1.000	6020	3/28/2014	14:13	032814A
	Arsenic	0.420	U		+/-0.420	0.420	1.000	6020	3/28/2014	14:13	032814A
	Beryllium	0.032	U		+/-0.032	0.032	0.500	6020	3/28/2014	14:13	032814A
	Cadmium	0.091	U		+/-0.091	0.091	0.400	6020	3/28/2014	14:13	032814A
	Chromium	0.180	U		+/-0.180	0.180	1.000	6020	3/28/2014	14:13	032814A
	Lead	0.120	U		+/-0.120	0.120	0.500	6020	3/28/2014	14:13	032814A
	Manganese	0.380	i		+/-0.120	0.120	2.000	6020	3/28/2014	14:13	032814A
	Molybdenum	0.310	i		+/-0.280	0.280	2.000	6020	3/28/2014	14:13	032814A
	Selenium	1.100	U		+/-1.100	1.100	2.000	6020	3/28/2014	14:13	032814A
	Thallium	0.050	U		+/-0.050	0.050	0.200	6020	3/28/2014	14:13	032814A

Dissolved Metals

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INTERFERENCE CHECK SAMPLE

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

ICS Source: **Instrument ID:** PE Optima ICP

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Method	Analysis Date	Analysis Time	Run Number
ICSA									
	Aluminum	753000	750000	100	80 - 120%	6010B	3/21/2014	18:19	032114A1
	Iron	668000	750000	89	80 - 120%	6010B	3/21/2014	18:19	032114A1
	Sodium	34			0.0 to 0.0	6010B	3/21/2014	18:19	032114A1
ICSAB									
	Aluminum	766000	752000	102	80 - 120%	6010B	3/21/2014	18:27	032114A1
	Iron	677000	752000	90	80 - 120%	6010B	3/21/2014	18:27	032114A1
	Sodium	11200	10000	112	80 - 120%	6010B	3/21/2014	18:27	032114A1
ICSA									
	Aluminum	757000	750000	101	80 - 120%	6010B	3/22/2014	01:21	032114A1
	Iron	667000	750000	89	80 - 120%	6010B	3/22/2014	01:21	032114A1
	Sodium	28			0.0 to 0.0	6010B	3/22/2014	01:21	032114A1
ICSAB									
	Aluminum	770000	752000	102	80 - 120%	6010B	3/22/2014	01:29	032114A1
	Iron	678000	752000	90	80 - 120%	6010B	3/22/2014	01:29	032114A1
	Sodium	11400	10000	114	80 - 120%	6010B	3/22/2014	01:29	032114A1
ICSA									
	Antimony	0.2			-2.0 to 2.0	6020	3/26/2014	23:23	032614B
	Arsenic	-0.5			-2.0 to 2.0	6020	3/26/2014	23:23	032614B
	Beryllium	0.024			-1.000 to 1.000	6020	3/26/2014	23:23	032614B
	Cadmium	0.1			-0.8 to 0.8	6020	3/26/2014	23:23	032614B
	Chromium	1.1			-2.0 to 2.0	6020	3/26/2014	23:23	032614B
	Lead	-0.2			-1.0 to 2.0	6020	3/26/2014	23:23	032614B
	Manganese	0.4			-4.0 to 4.0	6020	3/26/2014	23:23	032614B
	Molybdenum	1100.0	1000.0	110	80 - 120%	6020	3/26/2014	23:23	032614B
	Selenium	0.1			-4.0 to 4.0	6020	3/26/2014	23:23	032614B
	Thallium	0.0			-0.4 to 0.4	6020	3/26/2014	23:23	032614B

Dissolved Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

ICS Source: Instrument ID: ICP-MS

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Method	Analysis Date	Analysis Time	Run Number
ICSAB									
	Antimony	21.0	20.0	105	80 - 120%	6020	3/26/2014	23:28	032614B
	Arsenic	21.7	20.0	108	80 - 120%	6020	3/26/2014	23:28	032614B
	Beryllium	9.630	10.000	96	80 - 120%	6020	3/26/2014	23:28	032614B
	Cadmium	7.6	8.0	95	80 - 120%	6020	3/26/2014	23:28	032614B
	Chromium	22.1	20.0	110	80 - 120%	6020	3/26/2014	23:28	032614B
	Lead	10.0	10.0	100	80 - 120%	6020	3/26/2014	23:28	032614B
	Manganese	41.2	40.0	103	80 - 120%	6020	3/26/2014	23:28	032614B
	Molybdenum	1150.0	1040.0	111	80 - 120%	6020	3/26/2014	23:28	032614B
	Selenium	41.1	40.0	103	80 - 120%	6020	3/26/2014	23:28	032614B
	Thallium	4.0	4.0	100	80 - 120%	6020	3/26/2014	23:28	032614B
ICSA									
	Antimony	0.1			-2.0 to 2.0	6020	3/28/2014	13:52	032814A
	Arsenic	0.5			-2.0 to 2.0	6020	3/28/2014	13:52	032814A
	Beryllium	0.025			-1.000 to 1.000	6020	3/28/2014	13:52	032814A
	Cadmium	0.3			-0.8 to 0.8	6020	3/28/2014	13:52	032814A
	Chromium	0.7			-2.0 to 2.0	6020	3/28/2014	13:52	032814A
	Lead	0.1			-1.0 to 2.0	6020	3/28/2014	13:52	032814A
	Manganese	0.3			-4.0 to 4.0	6020	3/28/2014	13:52	032814A
	Molybdenum	1050.0	1000.0	105	80 - 120%	6020	3/28/2014	13:52	032814A
	Selenium	1.0			-4.0 to 4.0	6020	3/28/2014	13:52	032814A
	Thallium	0.0			-0.4 to 0.4	6020	3/28/2014	13:52	032814A
ICSAB									
	Antimony	20.9	20.0	104	80 - 120%	6020	3/28/2014	13:57	032814A
	Arsenic	20.7	20.0	104	80 - 120%	6020	3/28/2014	13:57	032814A
	Beryllium	9.240	10.000	92	80 - 120%	6020	3/28/2014	13:57	032814A
	Cadmium	8.1	8.0	101	80 - 120%	6020	3/28/2014	13:57	032814A
	Chromium	21.7	20.0	108	80 - 120%	6020	3/28/2014	13:57	032814A
	Lead	9.9	10.0	99	80 - 120%	6020	3/28/2014	13:57	032814A
	Manganese	40.8	40.0	102	80 - 120%	6020	3/28/2014	13:57	032814A
	Molybdenum	1100.0	1040.0	106	80 - 120%	6020	3/28/2014	13:57	032814A
	Selenium	41.9	40.0	105	80 - 120%	6020	3/28/2014	13:57	032814A
	Thallium	4.0	4.0	100	80 - 120%	6020	3/28/2014	13:57	032814A

Dissolved Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

ICS Source: **Instrument ID:** ICP-MS

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Method	Analysis Date	Analysis Time	Run Number

Dissolved Metals
- 5a -
MATRIX SPIKE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-001 **Client ID:** GAIN-M-25A-031814S

Percent Solids for Sample: 0.00 **Spiked ID:** J1402025-001S **Percent Solids for Spike Sample:** 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Mercury	ug/L	75 - 125	1.23		0.01	U	1.25	98		7470A

Dissolved Metals

- 5a -

MATRIX SPIKE DUPLICATE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-001 **Client ID:** GAIN-M-25A-031814SD

Percent Solids for Sample: 0.00 **Spiked ID:** J1402025-001SD **Percent Solids for Spike Sample:** 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Mercury	ug/L	75 - 125	1.24		0.01	U	1.25	98		7470A

Dissolved Metals
- 5a -
MATRIX SPIKE SUMMARY

Client: Beazer East, Inc. Level: LOW SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Matrix: WATER Sample ID: J1402025-002 Client ID: GAIN-M-36B-031814S

Percent Solids for Sample: 0.00 Spiked ID: J1402025-002S Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Aluminum	ug/L	75 - 125	5230.000		110.000		5000	102		6010B
Iron	ug/L	75 - 125	5800.000		753.000		5000	101		6010B
Sodium	ug/L	75 - 125	32200.000		6770.000		25000	102		6010B

Dissolved Metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-002 **Client ID:** GAIN-M-36B-031814SD

Percent Solids for Sample: 0.00 **Spiked ID:** J1402025-002SD **Percent Solids for Spike Sample:** 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Aluminum	ug/L	75 - 125	5100.000		110.000		5000	100		6010B
Iron	ug/L	75 - 125	5720.000		753.000		5000	99		6010B
Sodium	ug/L	75 - 125	32200.000		6770.000		25000	102		6010B

Dissolved Metals
- 5a -
MATRIX SPIKE SUMMARY

Client: Beazer East, Inc. Level: LOW SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Matrix: WATER Sample ID: J1402025-007 Client ID: GAIN-HG-22D-031914S

Percent Solids for Sample: 0.00 Spiked ID: J1402025-007S Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Antimony	ug/L	75 - 125	51.60		0.38		50.0	102		6020
Arsenic	ug/L	75 - 125	50.80		0.62		50.0	100		6020
Beryllium	ug/L	75 - 125	23.3		0.0	U	25.0	93		6020
Cadmium	ug/L	75 - 125	20.6		0.6		20.0	100		6020
Chromium	ug/L	75 - 125	52.40		0.55		50.0	104		6020
Lead	ug/L	75 - 125	24.60		0.12	U	25.0	98		6020
Manganese	ug/L	75 - 125	110.0		11.0		100.0	99		6020
Molybdenum	ug/L	75 - 125	106.00		1.82		100.0	104		6020
Selenium	ug/L	75 - 125	92.6		1.1	U	100.0	93		6020
Thallium	ug/L	75 - 125	10.10		0.05	U	10.0	101		6020

Dissolved Metals

- 5a -

MATRIX SPIKE DUPLICATE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-007 **Client ID:** GAIN-HG-22D-031914SD

Percent Solids for Sample: 0.00 **Spiked ID:** J1402025-007SD **Percent Solids for Spike Sample:** 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Antimony	ug/L	75 - 125	52.10		0.38		50.0	103		6020
Arsenic	ug/L	75 - 125	51.40		0.62		50.0	102		6020
Beryllium	ug/L	75 - 125	23.5		0.0	U	25.0	94		6020
Cadmium	ug/L	75 - 125	20.9		0.6		20.0	102		6020
Chromium	ug/L	75 - 125	52.90		0.55		50.0	105		6020
Lead	ug/L	75 - 125	24.90		0.12	U	25.0	100		6020
Manganese	ug/L	75 - 125	120.0		11.0		100.0	109		6020
Molybdenum	ug/L	75 - 125	106.00		1.82		100.0	104		6020
Selenium	ug/L	75 - 125	94.4		1.1	U	100.0	94		6020
Thallium	ug/L	75 - 125	10.20		0.05	U	10.0	102		6020

Dissolved Metals

- 5b -

POST DIGEST SPIKE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-M-25A-031814A

Sample ID: J1402025-001 **Spiked ID:** J1402025-001A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Mercury	ug/L	75 - 125	4.94		0.01	U	5.00	99		7470A

Dissolved Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-M-36B-031814A

Sample ID: J1402025-002 **Spiked ID:** J1402025-002A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Aluminum	ug/L	75 - 125	5270.000		110.000		5000	103		6010B
Iron	ug/L	75 - 125	5800.000		753.000		5000	101		6010B
Sodium	ug/L	75 - 125	32400.000		6770.000		25000	103		6010B

Dissolved Metals

- 5b -

POST DIGEST SPIKE SUMMARY

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Matrix: WATER Level: LOW Client ID: GAIN-HG-22D-031914A

Sample ID: J1402025-007 Spiked ID: J1402025-007A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	Method
Antimony	ug/L	75 - 125	51.00		0.38		50.0	101		6020
Arsenic	ug/L	75 - 125	50.70		0.62		50.0	100		6020
Beryllium	ug/L	75 - 125	24.00		0.03	U	25.0	96		6020
Cadmium	ug/L	75 - 125	21.20		0.57		20.0	103		6020
Chromium	ug/L	75 - 125	52.00		0.55		50.0	103		6020
Lead	ug/L	75 - 125	24.80		0.12	U	25.0	99		6020
Manganese	ug/L	75 - 125	114.00		11.20		100.0	103		6020
Molybdenum	ug/L	75 - 125	105.00		1.82		100.0	103		6020
Selenium	ug/L	75 - 125	97.40		1.10	U	100.0	97		6020
Thallium	ug/L	75 - 125	10.30		0.05	U	10.0	103		6020

Dissolved Metals
- 6 -
DUPLICATE SAMPLE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-007S **Client ID:** GAIN-HG-22D-031914SD

Percent Solids for Sample: 0.00 **Duplicate ID:** J1402025-007SD **Percent Solids for Duplicate:** 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	Method
Antimony	ug/L	0 - 30	51.60		52.10		1		6020
Arsenic	ug/L	0 - 30	50.80		51.40		1		6020
Beryllium	ug/L	0 - 30	23.3		23.5		1		6020
Cadmium	ug/L	0 - 30	20.6		20.9		1		6020
Chromium	ug/L	0 - 30	52.40		52.90		1		6020
Lead	ug/L	0 - 30	24.60		24.90		1		6020
Manganese	ug/L	0 - 30	110.0		120.0		9		6020
Molybdenum	ug/L	0 - 30	106.00		106.00		0		6020
Selenium	ug/L	0 - 30	92.6		94.4		2		6020
Thallium	ug/L	0 - 30	10.10		10.20		1		6020

Dissolved Metals
- 6 -
DUPLICATE SAMPLE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-001S **Client ID:** GAIN-M-25A-031814SD

Percent Solids for Sample: 0.00 **Duplicate ID:** J1402025-001SD **Percent Solids for Duplicate:** 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	Method
Mercury	ug/L	0 - 30	1.23		1.24		1		7470A

Dissolved Metals
- 6 -
DUPLICATE SAMPLE SUMMARY

Client: Beazer East, Inc. **Level:** LOW **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Sample ID:** J1402025-002S **Client ID:** GAIN-M-36B-031814SD

Percent Solids for Sample: 0.00 **Duplicate ID:** J1402025-002SD **Percent Solids for Duplicate:** 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	Method
Aluminum	ug/L	0 - 30	5230.000		5100.000		3		6010B
Iron	ug/L	0 - 30	5800.000		5720.000		1		6010B
Sodium	ug/L	0 - 30	32200.000		32200.000		0		6010B

Dissolved Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	Method
LCS-02113-01								
	Mercury	ug/L	1.25	1.25		100	80.0 - 120.0	7470A

Dissolved Metals
- 7 -
LABORATORY CONTROL SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Aqueous LCS Source: High Purity STDs **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	Method
LCS-02130-01								
	Aluminum	ug/L	5000	5210		104	80.0 - 120.0	6010B
	Iron	ug/L	5000	5050		101	80.0 - 120.0	6010B
	Sodium	ug/L	25000	25600		102	80.0 - 120.0	6010B

Dissolved Metals

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Aqueous LCS Source: Inorganic Ventures **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	Method
LCS-02133-03								
	Antimony	ug/L	50.0	52.4		105	80.0 - 120.0	6020
	Arsenic	ug/L	50.0	52.1		104	80.0 - 120.0	6020
	Beryllium	ug/L	25.0	25.1		100	80.0 - 120.0	6020
	Cadmium	ug/L	20.0	19.8		99	80.0 - 120.0	6020
	Chromium	ug/L	50.0	50.9		102	80.0 - 120.0	6020
	Lead	ug/L	25.0	27.1		108	80.0 - 120.0	6020
	Manganese	ug/L	100.0	104.0		104	80.0 - 120.0	6020
	Molybdenum	ug/L	100.0	103.0		103	80.0 - 120.0	6020
	Selenium	ug/L	100.0	100.0		100	80.0 - 120.0	6020
	Thallium	ug/L	10.0	10.5		105	80.0 - 120.0	6020

Dissolved Metals
- 7 -
LABORATORY CONTROL SAMPLE SUMMARY

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	Method
LCS-02258-01								
	Antimony	ug/L	50.0	52.3		105	80.0 - 120.0	6020
	Arsenic	ug/L	50.0	51.2		102	80.0 - 120.0	6020
	Beryllium	ug/L	25.0	24.2		97	80.0 - 120.0	6020
	Cadmium	ug/L	20.0	20.7		104	80.0 - 120.0	6020
	Chromium	ug/L	50.0	52.3		105	80.0 - 120.0	6020
	Lead	ug/L	25.0	25.7		103	80.0 - 120.0	6020
	Manganese	ug/L	100.0	107.0		107	80.0 - 120.0	6020
	Molybdenum	ug/L	100.0	105.0		105	80.0 - 120.0	6020
	Selenium	ug/L	100.0	101.0		101	80.0 - 120.0	6020
	Thallium	ug/L	10.0	10.2		102	80.0 - 120.0	6020

Dissolved Metals

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SERIAL DILUTION SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-HG-22D-031914L

Sample ID: J1402025-007 **Serial Dilution ID:** J1402025-007L

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	Method
Antimony	0.38		0.16	U	100.0		10.00 %	6020
Arsenic	0.623		0.420	U	100.0		10.00 %	6020
Beryllium	0.032	U	0.032	U			10.00 %	6020
Cadmium	0.570		0.730	i	28		10.00 %	6020
Chromium	0.547		0.180	U	100.0		10.00 %	6020
Lead	0.120	U	0.120	U			10.00 %	6020
Manganese	11.200		12.200		9		10.00 %	6020
Molybdenum	1.820		3.400	i	87		10.00 %	6020
Selenium	1.100	U	1.100	U			10.00 %	6020
Thallium	0.050	U	0.050	U			10.00 %	6020

Dissolved Metals

- 9 -

SERIAL DILUTION SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-M-25A-031814L

Sample ID: J1402025-001 **Serial Dilution ID:** J1402025-001L

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	Method
Mercury	0.01	U	0.01	U			10.00 %	7470A

Dissolved Metals

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SERIAL DILUTION SAMPLE SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Matrix: WATER **Level:** LOW **Client ID:** GAIN-M-36B-031814L

Sample ID: J1402025-002 **Serial Dilution ID:** J1402025-002L

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	Method
Aluminum	110.000		134.000	I	21.8		10.00 %	6010B
Iron	753.000		826.000		9.7		10.00 %	6010B
Sodium	6772.000		6925.000		2.3		10.00 %	6010B

Dissolved Metals
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METHOD DETECTION LIMITS

Client: Beazer East, Inc. SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK Case No.: SAS No.:

Analyte	Wave- length (nm)	MDL ug/L	MRL ug/L
Cetac Hg Analyzer			**Date:** 1/11/2012
Mercury	253.70	0.012	0.100
ICP-MS			**Date:** 1/20/2012
Antimony	123	0.16	1.00
Arsenic	75	0.42	1.00
Beryllium	9	0.032	0.50
Cadmium	114	0.09	0.40
Chromium	52	0.18	1.00
Lead	208	0.12	0.50
Manganese	55	0.12	2.00
Molybdenum	98	0.28	2.00
Selenium	78	1.10	2.00
Thallium	205	0.050	0.20
PE Optima ICP			**Date:** 2/3/2012
Aluminum	308.215	11.00	100.00
Iron	273.955	2.50	100.00
Sodium	589.592	29.00	500.00

Dissolved Metals

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LINEAR RANGES

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Instrument ID: ICP-MS **Date:** 12/31/2013

Analyte	Integration Time (sec)	LDR ug/L
Antimony	15.00	5000
Arsenic	15.00	5000
Beryllium	15.00	3000
Cadmium	15.00	2500
Chromium	15.00	5000
Lead	15.00	5000
Manganese	15.00	5000
Molybdenum	15.00	5000
Selenium	15.00	5000
Thallium	15.00	5000

Dissolved Metals
- 12 -
LINEAR RANGES

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Case No.:** **SAS No.:**

Instrument ID: PE Optima ICP **Date:** 12/31/2013

Analyte	Integration Time (sec)	LDR ug/L
Aluminum	5.00	1000000
Iron	5.00	1200000
Sodium	5.00	500000

Dissolved Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Beazer East, Inc.

SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK

Method: CV

Case No.: SAS No.:

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	204565						
MB-02113-02	MB-02113-02	MB	WATER	3/20/14	40.0	40.0	
LCS-02113-01	LCS-02113-01	LCS	WATER	3/20/14	40.0	40.0	
J1402025-001	GAIN-M-25A-031814	SAM	WATER	3/20/14	40.0	40.0	
J1402025-001S	GAIN-M-25A-031814S	MS	WATER	3/20/14	40.0	40.0	
J1402025-001SD	GAIN-M-25A-031814SD	MSD	WATER	3/20/14	40.0	40.0	
J1402025-002	GAIN-M-36B-031814	SAM	WATER	3/20/14	40.0	40.0	
J1402025-003	GAIN-HG-24S-031814	SAM	WATER	3/20/14	40.0	40.0	
J1402025-004	GAIN-M-25B-031814	SAM	WATER	3/20/14	40.0	40.0	
J1402025-005	GAIN-HG-33S-031914	SAM	WATER	3/20/14	40.0	40.0	
J1402025-006	GAIN-HG-34S-031914	SAM	WATER	3/20/14	40.0	40.0	
J1402025-007	GAIN-HG-22D-031914	SAM	WATER	3/20/14	40.0	40.0	

Dissolved Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Beazer East, Inc.

SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK

Method: P

Case No.: SAS No.:

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	204591						
MB-02130-02	MB-02130-02	MB	WATER	3/21/14	50.0	50.0	
LCS-02130-01	LCS-02130-01	LCS	WATER	3/21/14	50.0	50.0	
J1402025-001	GAIN-M-25A-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-002	GAIN-M-36B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-002S	GAIN-M-36B-031814S	MS	WATER	3/21/14	50.0	50.0	
J1402025-002SD	GAIN-M-36B-031814SD	MSD	WATER	3/21/14	50.0	50.0	
J1402025-003	GAIN-HG-24S-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-004	GAIN-M-25B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-005	GAIN-HG-33S-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-006	GAIN-HG-34S-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-007	GAIN-HG-22D-031914	SAM	WATER	3/21/14	50.0	50.0	

Dissolved Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Beazer East, Inc. **SDG No.:** J1402025

Contract: OM-0450-14 **Lab Code:** ALJCK **Method:** MS

Case No.: **SAS No.:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	204595						
MB-02133-04	MB-02133-04	MB	WATER	3/21/14	50.0	50.0	
LCS-02133-03	LCS-02133-03	LCS	WATER	3/21/14	50.0	50.0	
J1402025-001	GAIN-M-25A-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-002	GAIN-M-36B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-003	GAIN-HG-24S-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-004	GAIN-M-25B-031814	SAM	WATER	3/21/14	50.0	50.0	
J1402025-005	GAIN-HG-33S-031914	SAM	WATER	3/21/14	50.0	50.0	
J1402025-006	GAIN-HG-34S-031914	SAM	WATER	3/21/14	50.0	50.0	

Dissolved Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: Beazer East, Inc.

SDG No.: J1402025

Contract: OM-0450-14 Lab Code: ALJCK

Method: MS

Case No.: SAS No.:

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	204900						
MB-02258-02	MB-02258-02	MB	WATER	3/26/14	50.0	50.0	
LCS-02258-01	LCS-02258-01	LCS	WATER	3/26/14	50.0	50.0	
J1402025-007	GAIN-HG-22D-031914	SAM	WATER	3/26/14	50.0	50.0	
J1402025-007S	GAIN-HG-22D-031914S	MS	WATER	3/26/14	50.0	50.0	
J1402025-007SD	GAIN-HG-22D-031914SD	MSD	WATER	3/26/14	50.0	50.0	

Dissolved Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N
CALIB BLANK	1.00	1741		X										X									X				
CALIB STD 1	1.00	1746		X										X									X				
CALIB STD 2	1.00	1751		X										X									X				
CALIB STD 3	1.00	1755		X										X									X				
CALIB STD 4	1.00	1758		X										X									X				
ICV	1.00	1801		X										X									X				
ICB	1.00	1805		X										X									X				
ZZZZZZ	1.00	1810																									
MRL	1.00	1815		X										X									X				
ICSA	1.00	1819		X										X									X				
ICSAB	1.00	1827		X										X									X				
CCV	1.00	1835		X										X									X				
CCB	1.00	1839		X										X									X				
ZZZZZZ	2.00	1844																									
ZZZZZZ	5.00	1852																									
ZZZZZZ	2.00	1857																									
ZZZZZZ	1.00	1905																									
ZZZZZZ	1.00	1910																									
ZZZZZZ	1.00	1914																									
ZZZZZZ	1.00	1923																									
ZZZZZZ	1.00	1928																									
ZZZZZZ	1.00	1933																									
ZZZZZZ	1.00	1938																									
CCV	1.00	1942		X										X									X				
CCB	1.00	1946		X										X									X				
ZZZZZZ	1.00	1951																									
ZZZZZZ	1.00	1955																									
ZZZZZZ	1.00	2000																									
ZZZZZZ	1.00	2005																									
ZZZZZZ	1.00	2010																									
ZZZZZZ	1.00	2015																									
ZZZZZZ	1.00	2019																									
ZZZZZZ	1.00	2024																									
ZZZZZZ	1.00	2029																									
ZZZZZZ	1.00	2034																									
CCV	1.00	2038		X										X									X				

Dissolved Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	2042		X										X									X				
ZZZZZZ	1.00	2047																									
ZZZZZZ	1.00	2052																									
ZZZZZZ	1.00	2057																									
ZZZZZZ	1.00	2102																									
ZZZZZZ	1.00	2106																									
ZZZZZZ	1.00	2109																									
ZZZZZZ	5.00	2113																									
ZZZZZZ	1.00	2117																									
ZZZZZZ	1.00	2121																									
ZZZZZZ	1.00	2126																									
CCV	1.00	2130		X										X									X				
CCB	1.00	2134		X										X									X				
ZZZZZZ	1.00	2138																									
ZZZZZZ	1.00	2142																									
ZZZZZZ	1.00	2146																									
ZZZZZZ	1.00	2149																									
ZZZZZZ	5.00	2153																									
ZZZZZZ	1.00	2157																									
ZZZZZZ	1.00	2201																									
ZZZZZZ	1.00	2206																									
ZZZZZZ	1.00	2210																									
ZZZZZZ	1.00	2214																									
CCV	1.00	2218		X										X									X				
CCB	1.00	2222		X										X									X				
ZZZZZZ	1.00	2227																									
ZZZZZZ	1.00	2232																									
ZZZZZZ	1.00	2236																									
ZZZZZZ	1.00	2239																									
ZZZZZZ	5.00	2243																									
ZZZZZZ	1.00	2247																									
ZZZZZZ	1.00	2251																									
ZZZZZZ	1.00	2256																									
ZZZZZZ	1.00	2301																									
ZZZZZZ	1.00	2306																									
CCV	1.00	2311		X										X									X				

Dissolved Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: PE Optima ICP Method: P Run Number: 032114A1

Start Date: 3/21/2014 End Date: 3/22/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	2314		X										X									X				
ZZZZZZ	1.00	2319																									
ZZZZZZ	1.00	2323																									
ZZZZZZ	1.00	2327																									
ZZZZZZ	1.00	2331																									
ZZZZZZ	1.00	2335																									
ZZZZZZ	5.00	2338																									
ZZZZZZ	1.00	2343																									
ZZZZZZ	1.00	2346																									
ZZZZZZ	1.00	2351																									
ZZZZZZ	1.00	2356																									
CCV	1.00	2359		X										X									X				
CCB	1.00	0002		X										X									X				
ZZZZZZ	1.00	0007																									
ZZZZZZ	1.00	0013																									
MB-02130-02	1.00	0017		X										X									X				
LCS-02130-01	1.00	0022		X										X									X				
GAIN-M-25A-031814	1.00	0025		X										X									X				
GAIN-M-36B-031814	1.00	0030		X										X									X				
GAIN-M-36B-031814S	1.00	0035		X										X									X				
GAIN-M-36B-031814SD	1.00	0038		X										X									X				
GAIN-M-36B-031814L	5.00	0041		X										X									X				
GAIN-M-36B-031814A	1.00	0046		X										X									X				
CCV	1.00	0049		X										X									X				
CCB	1.00	0053		X										X									X				
GAIN-HG-24S-031814	1.00	0057		X										X									X				
GAIN-M-25B-031814	1.00	0102		X										X									X				
GAIN-HG-33S-031914	1.00	0107		X										X									X				
GAIN-HG-34S-031914	1.00	0112		X										X									X				
GAIN-HG-22D-031914	1.00	0117		X										X									X				
ICSA	1.00	0121		X										X									X				
ICSAB	1.00	0129		X										X									X				
CCV	1.00	0137		X										X									X				
CCB	1.00	0141		X										X									X				

Dissolved Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: Cetac Hg Analyzer Method: CV Run Number: 032414B

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Calibration Blank	1.00	1643																X									
Standard #1	1.00	1644																X									
Standard #2	1.00	1645																X									
Standard #3	1.00	1647																X									
Standard #4	1.00	1648																X									
Standard #5	1.00	1650																X									
Standard #6	1.00	1652																X									
ICV	1.00	1654																X									
ICB	1.00	1656																X									
MRL 0.1	1.00	1657																X									
MB-02113-02	1.00	1659																X									
LCS-02113-01	1.00	1700																X									
GAIN-M-25A-031814	1.00	1701																X									
GAIN-M-25A-031814S	1.00	1702																X									
GAIN-M-25A-031814SD	1.00	1704																X									
GAIN-M-25A-031814A	1.00	1706																X									
GAIN-M-25A-031814L	5.00	1708																X									
GAIN-M-36B-031814	1.00	1709																X									
GAIN-HG-24S-031814	1.00	1710																X									
GAIN-M-25B-031814	1.00	1711																X									
CCV-1	1.00	1712																X									
CCB-1	1.00	1715																X									
GAIN-HG-33S-031914	1.00	1716																X									
GAIN-HG-34S-031914	1.00	1717																X									
GAIN-HG-22D-031914	1.00	1718																X									
ZZZZZZ	1.00	1719																									
ZZZZZZ	1.00	1720																									
ZZZZZZ	1.00	1722																									
ZZZZZZ	1.00	1723																									
ZZZZZZ	1.00	1725																									
ZZZZZZ	1.00	1727																									
ZZZZZZ	5.00	1728																									
CCV-2	1.00	1730																X									
CCB-2	1.00	1732																X									
ZZZZZZ	1.00	1733																									
ZZZZZZ	1.00	1734																									

Dissolved Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: Cetac Hg Analyzer Method: CV Run Number: 032414B

Start Date: 3/24/2014 End Date: 3/24/2014

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1735																									
ZZZZZZ	1.00	1736																									
ZZZZZZ	1.00	1737																									
ZZZZZZ	1.00	1738																									
ZZZZZZ	1.00	1740																									
ZZZZZZ	1.00	1741																									
ZZZZZZ	1.00	1742																									
ZZZZZZ	1.00	1743																									
CCV-3	1.00	1745																X									
CCB-3	1.00	1747																X									

Dissolved Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: ICP-MS Method: MS Run Number: 032614B

Start Date: 3/26/2014 End Date: 3/27/2014

EPA Sample No.	D/F	Time	% R	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
Cal Blank	1.00	2243			X	X		X	X		X				X		X				X			X				*
Cal 1	1.00	2248			X	X		X	X		X				X		X				X			X				*
Cal 2	1.00	2253			X	X		X	X		X				X		X				X			X				*
Cal 3	1.00	2258			X	X		X	X		X				X		X				X			X				*
Cal 4	1.00	2303			X	X		X	X		X				X		X				X			X				*
ICV	1.00	2308			X	X		X	X		X				X		X				X			X				*
ICB	1.00	2313			X	X		X	X		X				X		X				X			X				*
MRL	1.00	2318			X	X		X	X		X				X		X				X			X				*
ICSA	1.00	2323			X	X		X	X		X				X		X				X			X				*
ICSAB	1.00	2328			X	X		X	X		X				X		X				X			X				*
CCV-1	1.00	2333			X	X		X	X		X				X		X				X			X				*
CCB-1	1.00	2338			X	X		X	X		X				X		X				X			X				*
MB-02133-04	1.00	2343			X	X		X	X		X				X		X				X			X				*
LCS-02133-03	1.00	2348			X	X		X	X		X				X		X				X			X				*
ZZZZZZ	1.00	2353																										
ZZZZZZ	1.00	2358																										
ZZZZZZ	1.00	0003																										
ZZZZZZ	1.00	0008																										
GAIN-M-25A-031814	1.00	0013			X	X		X	X		X				X		X				X			X				*
GAIN-M-36B-031814	1.00	0018			X	X		X	X		X				X		X				X			X				*
GAIN-HG-24S-031814	1.00	0023			X	X		X	X		X				X		X				X			X				*
GAIN-M-25B-031814	1.00	0028			X	X		X	X		X				X		X				X			X				*
CCV-2	1.00	0033			X	X		X	X		X				X		X				X			X				*
CCB-2	1.00	0038			X	X		X	X		X				X		X				X			X				*
GAIN-HG-33S-031914	1.00	0043			X	X		X	X		X				X		X				X			X				*
GAIN-HG-34S-031914	1.00	0049			X	X		X	X		X				X		X				X			X				*
ZZZZZZ	1.00	0054																										
ZZZZZZ	1.00	0059																										
ZZZZZZ	1.00	0104																										
ZZZZZZ	5.00	0109																										
ZZZZZZ	1.00	0114																										
ZZZZZZ	1.00	0119																										
ZZZZZZ	1.00	0124																										
ZZZZZZ	1.00	0129																										
CCV-3	1.00	0134			X	X		X	X		X				X		X				X			X				*
CCB-3	1.00	0139			X	X		X	X		X				X		X				X			X				*

Dissolved Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: ____ SAS No.: ____ SDG No.: J1402025

Instrument ID Number: ICP-MS Method: MS Run Number: 032614B

Start Date: 3/26/2014 End Date: 3/27/2014

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
ZZZZZZ	1.00	0144																										
ZZZZZZ	1.00	0149																										
CCV-4	1.00	0154			X	X		X	X		X				X		X				X			X				*
CCB-4	1.00	0159			X	X		X	X		X				X		X				X			X				*

Dissolved Metals
14
ANALYSIS RUN LOG

Client: Beazer East, Inc. Contract: OM-0450-14

Lab Code: ALJCK Case No.: SAS No.: SDG No.: J1402025

Instrument ID Number: ICP-MS Method: MS Run Number: 032814A

Start Date: 3/28/2014 End Date: 3/28/2014

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN	
Cal Blank	1.00	1312			X	X		X	X		X				X		X				X			X				*
Cal 1	1.00	1317			X	X		X	X		X				X		X				X			X				*
Cal 2	1.00	1322			X	X		X	X		X				X		X				X			X				*
Cal 3	1.00	1327			X	X		X	X		X				X		X				X			X				*
Cal 4	1.00	1332			X	X		X	X		X				X		X				X			X				*
ICV	1.00	1337			X	X		X	X		X				X		X				X			X				*
ICB	1.00	1342			X	X		X	X		X				X		X				X			X				*
MRL	1.00	1347			X	X		X	X		X				X		X				X			X				*
ICSA	1.00	1352			X	X		X	X		X				X		X				X			X				*
ICSAB	1.00	1357			X	X		X	X		X				X		X				X			X				*
CCV-1	1.00	1402			X	X		X	X		X				X		X				X			X				*
CCB-1	1.00	1408			X	X		X	X		X				X		X				X			X				*
MB-02258-02	1.00	1413			X	X		X	X		X				X		X				X			X				*
LCS-02258-01	1.00	1418			X	X		X	X		X				X		X				X			X				*
GAIN-HG-22D-031914	1.00	1423			X	X		X	X		X				X		X				X			X				*
GAIN-HG-22D-031914S	1.00	1428			X	X		X	X		X				X		X				X			X				*
GAIN-HG-22D-031914S	1.00	1433			X	X		X	X		X				X		X				X			X				*
GAIN-HG-22D-031914L	5.00	1438			X	X		X	X		X				X		X				X			X				*
GAIN-HG-22D-031914A	1.00	1443			X	X		X	X		X				X		X				X			X				*
ZZZZZZ	1.00	1448																										
ZZZZZZ	1.00	1453																										
ZZZZZZ	1.00	1458																										
CCV-2	1.00	1503			X	X		X	X		X				X		X				X			X				*
CCB-2	1.00	1508			X	X		X	X		X				X		X				X			X				*
ZZZZZZ	1.00	1513																										
ZZZZZZ	1.00	1518																										
ZZZZZZ	5.00	1523																										
ZZZZZZ	1.00	1528																										
ZZZZZZ	1.00	1533																										
CCV-3	1.00	1538			X	X		X	X		X				X		X				X			X				*
CCB-3	1.00	1543			X	X		X	X		X				X		X				X			X				*
ZZZZZZ	1.00	1548																										
ZZZZZZ	1.00	1553																										

Inorganic Analysis:
Metals

Validation Package

Raw Data

ALS Environmental

Analytical Run Coversheet

Analyst: Jordan Pauley   Data File ID: 032414C   LIMS Run #: 385022

Analysis: Mercury   Method References: 245.1, 7470, 7471   Inst ID: J-CVAA-01

Standard's Trace Numbers					
STD ID	Trace #	Exp Date	STD ID	Trace #	Exp Date
Primary Working STD	Met13 - 65E	3/27/14	Stannous Chloride	Met13-65H	3/27/14
Secondary Working STD	1 - 65F	3/27/14			

3/25/14 3/25/14

Standard	Conc (ug/L)	LCL 245.1	UCL 245.1	LCL 7000	UCL 7000	
MRL	0.1	50%	150%	50%	150%	
UQL	10					
LCS / LCSD	1.25	85%	115%	80%	120%	
LCS1(low)	0.5	70%	130%	70%	130%	
MS / MSD	1.25	70%	130%	75%	125%	
Post Spike	5	85%	115%	80%	120%	
ICV	5	95%	105%	90%	110%	
CCV	5	90%	110%	80%	120%	
DUP (RPD)			20%		20%	
SerialDilution			10%		10%	

Comments

Reviewed By / Date: JP 3/25/14

MERCURY DATA REPORTED WITH FAILING CRITERIA

Data File ID: 032414C

Sample ID	Failure(s)	Analyst's Comments

SB

Methods: 245.1 / 7470 / 7471

ALS Environmental

Mercury Data Summary Sheet

Analyst: Jordan Pauley

Instrument ID: J-CVAA-01

Sample ID	RPT	Raw Conc (ug/L)	DF	UNITS	QC	Comment	Samp Type	Date	Time	Method
Calibration Blank	Y	0.000	1	ug/L			ICAL	03/24/14	19:10:38	
Standard #1	Y	0.100	1	ug/L			ICAL	03/24/14	19:11:45	
Standard #2	Y	0.500	1	ug/L			ICAL	03/24/14	19:12:53	
Standard #3	Y	1.000	1	ug/L			ICAL	03/24/14	19:14:26	
Standard #4	Y	3.000	1	ug/L			ICAL	03/24/14	19:16:06	
Standard #5	Y	5.000	1	ug/L			ICAL	03/24/14	19:17:57	
Standard #6	Y	10.000	1	ug/L			ICAL	03/24/14	19:19:58	
ICV	Y	4.965	1	ug/L	99.3%		ICV	03/24/14	19:22:17	
ICB	Y	0.004	1	ug/L	CCB OK		CCB	03/24/14	19:24:23	
MRL 0.1	Y	0.097	1	ug/L	97.0%		MRL	03/24/14	19:25:30	
MB-02159-02	Y	0.001	1	ug/L	MB OK		MBLK	03/24/14	19:26:37	
LCS-02159-01	Y	1.220	1	ug/L	97.6%		LCS	03/24/14	19:27:44	
J1401837-002	Y	0.225	1	ug/L			SAMP	03/24/14	19:29:23	245.1 T
J1401837-003	Y	0.189	1	ug/L			SAMP	03/24/14	19:30:30	245.1 T
J1401881-001	Y	-0.037	1	ug/L			SAMP	03/24/14	19:31:38	245.1 T
J1401916-001	Y	0.048	1	ug/L			SAMP	03/24/14	19:32:46	7470 T
J1402025-001	Y	0.005	1	ug/L			SAMP	03/24/14	19:33:54	7470 T
J1402025-002	Y	0.004	1	ug/L			SAMP	03/24/14	19:35:03	7470 T
J1402025-003	Y	0.005	1	ug/L			SAMP	03/24/14	19:36:12	7470 T
J1402025-003MS	Y	1.232	1	ug/L	98.2%		MS	03/24/14	19:37:21	7470 T
CCV-1	Y	5.021	1	ug/L	100.4%		CCV	03/24/14	19:39:01	
CCB-1	Y	0.001	1	ug/L	CCB OK		CCB	03/24/14	19:41:03	
J1402025-003MSD	Y	1.226	1	ug/L	98%		MSD	03/24/14	19:42:12	
J1402025-003PS	Y	4.933	1	ug/L	98.6%		PS	03/24/14	19:43:54	7470 T
J1402025-003SD 5x	Y	0.000	5	ug/L	**		SD	03/24/14	19:45:54	7470 T
J1402025-004	Y	0.005	1	ug/L			SAMP	03/24/14	19:47:01	7470 T
J1402025-005	Y	0.008	1	ug/L			SAMP	03/24/14	19:48:08	7470 T
J1402025-006	Y	0.009	1	ug/L			SAMP	03/24/14	19:49:16	7470 T
J1402025-007	Y	0.008	1	ug/L			SAMP	03/24/14	19:50:24	7470 T
J1402037-001	Y	0.006	1	ug/L			SAMP	03/24/14	19:51:32	7470 T
J1402066-001	Y	0.009	1	ug/L			SAMP	03/24/14	19:52:40	7470 T
J1402066-002	Y	0.020	1	ug/L			SAMP	03/24/14	19:53:49	7470 T
CCV-2	Y	5.034	1	ug/L	100.7%		CCV	03/24/14	19:54:57	
CCB-2	Y	-0.001	1	ug/L	CCB OK		CCB	03/24/14	19:56:55	
J1402066-003	Y	0.002	1	ug/L			SAMP	03/24/14	19:58:04	7470 T
J1402066-004	Y	0.003	1	ug/L			SAMP	03/24/14	19:59:13	7470 T
J1402066-005	Y	0.005	1	ug/L			SAMP	03/24/14	20:00:23	7470 T
J1402066-006	Y	0.009	1	ug/L			SAMP	03/24/14	20:01:32	7470 T
J1402066-007	Y	0.008	1	ug/L			SAMP	03/24/14	20:02:39	7470 T
J1402066-008	Y	0.008	1	ug/L			SAMP	03/24/14	20:03:46	7470 T
CCV-3	Y	5.011	1	ug/L	100.2%		CCV	03/24/14	20:04:54	
CCB-3	Y	0.001	1	ug/L	CCB OK		CCB	03/24/14	20:06:55	

** RPD not calculated. Difference < 2 x MRL.
^^ % Rec. not calculated. Analyte concentration > 4 x Spike concentration

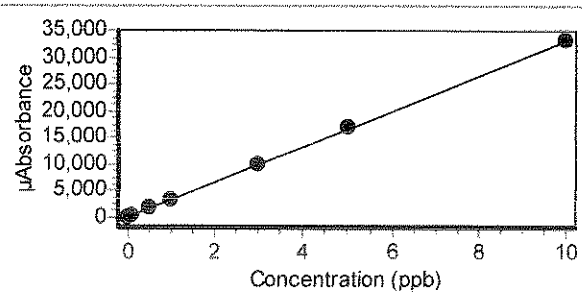
Report Generated By CETAC QuickTrace
Analyst: JAXMet
Worksheet file: J:\Mercury\Data\032414C JP 7470A 245.1.wsz
Date Started: 1/26/2010 14:48:08
Comment:

Results

Sample Name						Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
Calibration Blank						STD	03/24/14 07:10:38 pm	0.000	18	36.51	
	Replicates	23.1	25.9	13.1	10.7	16.2					
Standard #1						STD	03/24/14 07:11:45 pm	0.100	346	1.25	
	Replicates	340.9	347.1	349.6	350.6	342.2					
Standard #2						STD	03/24/14 07:12:53 pm	0.500	1690	0.66	
	Replicates	1672.9	1692.1	1699.2	1699.5	1684.8					
Standard #3						STD	03/24/14 07:14:26 pm	1.000	3390	0.68	
	Replicates	3354.1	3383.4	3410.7	3409.7	3392.4					
Standard #4						STD	03/24/14 07:16:06 pm	3.000	10069	0.63	
	Replicates	9968.9	10051.3	10108.3	10129.8	10088.7					
Standard #5						STD	03/24/14 07:17:57 pm	5.000	16921	0.63	
	Replicates	16756.7	16892.1	16992.1	17030.9	16935.5					
Standard #6						STD	03/24/14 07:19:58 pm	10.000	33229	0.65	
	Replicates	32892.9	33145.5	33348.3	33450.2	33307.8					

Calibration

Equation: A = 7.560 + 3393.750C + -0.007*
R2: 0.99998
SEE: 67.7104
Flags:



Sample Name						Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
ICV						ICV	03/24/14 07:22:17 pm	4.965	16691	0.68	
	Replicates	16514.8	16648.8	16747.3	16803.9	16740.2					
	% Recovery	99.30									

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
ICB					CCB	03/24/14 07:24:23 pm	0.004	19	24.57	
Replicates	17.7	26.1	22.4	17.2	13.9					
MRL 0.1					CRDL	03/24/14 07:25:30 pm	0.097	336	1.13	
Replicates	335.2	332.3	334.6	342.4	336.9					
% Recovery	96.88									
MB-02159-02					MB	03/24/14 07:26:37 pm	0.001	12	14.44	
Replicates	10.7	14.4	12.4	10.5	10.6					
LCS-02159-01					LCS	03/24/14 07:27:44 pm	1.220	4137	0.62	
Replicates	4094.2	4135.7	4154.5	4158.3	4142.8					
% Recovery	97.58									
J1401837-002					UNK	03/24/14 07:29:23 pm	0.225	769	0.92	
Replicates	757.5	771.4	776.7	770.4	770.5					
J1401837-003					UNK	03/24/14 07:30:30 pm	0.189	647	1.28	
Replicates	635.8	645.9	645.8	649.5	659.0					
J1401881-001					UNK	03/24/14 07:31:38 pm	-0.037	-118	5.12	
Replicates	-115.7	-118.8	-111.2	-118.6	-127.8					
J1401916-001					UNK	03/24/14 07:32:46 pm	0.048	169	0.95	
Replicates	169.1	169.1	170.7	169.3	166.3					
J1402025-001					UNK	03/24/14 07:33:54 pm	0.005	25	29.51	
Replicates	24.0	31.6	32.1	22.6	14.3					
J1402025-002					UNK	03/24/14 07:35:03 pm	0.004	20	40.00	
Replicates	25.3	30.1	21.5	11.4	12.6					
J1402025-003					UNK	03/24/14 07:36:12 pm	0.005	23	23.57	
Replicates	14.9	24.1	29.3	25.9	21.1					
J1402025-003S					MSK	03/24/14 07:37:21 pm	1.232	4180	0.64	
Replicates	4137.7	4171.6	4198.3	4204.8	4186.6					
% Recovery	98.23									

Sample Name						Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
CCV-1						CCV	03/24/14 07:39:01 pm	5.021	16876	0.61	
	Replicates	16717.3	16862.6	16953.2	16981.2	16864.4					
	% Recovery	100.41									
CCB-1						CCB	03/24/14 07:41:03 pm	0.001	11	34.51	
	Replicates	7.0	10.1	13.4	16.0	8.0					
J1402025-003SD						MSDUP	03/24/14 07:42:12 pm	1.226	4159	0.72	D
	Replicates	4112.1	4148.7	4181.7	4186.0	4165.4					
	% Recovery	97.73	RPD 199.68								
J1402025-003A						SPK	03/24/14 07:43:54 pm	4.933	16583	0.68	
	Replicates	16406.5	16540.8	16647.4	16695.3	16624.6					
	% Recovery	98.56									
J1402025-003L						UNK	03/24/14 07:45:54 pm	0.000	7	120.47	
	Replicates	13.0	16.1	4.5	3.6	-4.0					
J1402025-004						UNK	03/24/14 07:47:01 pm	0.005	23	12.58	
	Replicates	21.9	28.4	23.6	22.2	20.9					
J1402025-005						UNK	03/24/14 07:48:08 pm	0.008	35	17.10	
	Replicates	36.0	38.0	40.4	35.4	24.8					
J1402025-006						UNK	03/24/14 07:49:16 pm	0.009	37	17.54	
	Replicates	36.2	45.7	39.2	36.9	27.6					
J1402025-007						UNK	03/24/14 07:50:24 pm	0.008	35	23.79	
	Replicates	31.7	41.1	43.9	35.9	22.7					
J1402037-001						UNK	03/24/14 07:51:32 pm	0.006	27	9.18	
	Replicates	24.6	27.8	30.5	25.6	25.1					
J1402066-001						UNK	03/24/14 07:52:40 pm	0.009	37	13.27	
	Replicates	33.9	44.0	38.3	36.0	31.1					
J1402066-002						UNK	03/24/14 07:53:49 pm	0.020	75	4.37	
	Replicates	72.9	74.1	78.5	79.4	72.2					

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
CCV-2					CCV	03/24/14 07:54:57 pm	5.034	16921	0.65	
Replicates	16754.9	16887.8	16993.4	17042.2	16928.0					
% Recovery	100.69									
CCB-2					CCB	03/24/14 07:56:55 pm	-0.001	5	111.59	
Replicates	9.5	3.8	8.9	3.8	-3.2					
J1402066-003					UNK	03/24/14 07:58:04 pm	0.002	14	36.61	
Replicates	10.2	18.1	18.5	15.5	7.0					
J1402066-004					UNK	03/24/14 07:59:13 pm	0.003	19	12.22	
Replicates	18.0	22.5	21.3	16.8	18.3					
J1402066-005					UNK	03/24/14 08:00:23 pm	0.005	26	9.38	
Replicates	24.0	24.7	24.7	29.8	27.5					
J1402066-006					UNK	03/24/14 08:01:32 pm	0.009	38	7.22	
Replicates	33.9	35.3	39.6	38.8	39.9					
J1402066-007					UNK	03/24/14 08:02:39 pm	0.008	36	22.03	
Replicates	43.3	39.8	39.6	31.7	23.8					
J1402066-008					UNK	03/24/14 08:03:46 pm	0.008	36	6.54	
Replicates	34.6	36.4	38.5	36.5	32.3					
CCV-3					CCV	03/24/14 08:04:54 pm	5.011	16845	0.68	
Replicates	16670.1	16809.9	16918.8	16964.1	16862.7					
% Recovery	100.23									
CCB-3					CCB	03/24/14 08:06:55 pm	0.001	12	17.98	
Replicates	14.9	12.4	10.8	9.4	10.8					

Columbia Analytical Services

Analytical Run Coversheet

Analyst: LFISCHER

Data File ID: 032114A1

LIMS Run #: ~~384856~~ 384858

Analysis: ICP-AES

Method References: 200.7 / 6010

Inst ID: J-ICP-AES-01

Standard's Trace Numbers

STD ID	Trace #	Exp Date	STD ID	Trace #	Exp Date
ICAL-1	Met.17.80A	4-3-14	INT STD	Met.17-79B	5-9-14
ICAL-2	B		ICSA	77A	5-9-14
ICAL-3 / CCV	C		ICSAB	77B	
ICAL-4	D		Blank / Diluent	80G	3-6-15
ICV	Met.17-78B	3-24-14			

Standard Concentrations and Ranges

Element	MRL	Linear Range	ICV	CCV	LCS	ICSA	ICSAB	Units
Ag	0.01	5	0.5	0.5	0.5	0	0.2	mg/L
Al	0.1	1000	50	5	5	750	752	mg/L
As	0.01	40	1	0.5	0.5	0	0.2	mg/L
B	0.05	200	4	2.5	2.5	0	1	mg/L
Ba	0.01	45	2	0.5	0.5	0	0.2	mg/L
Be	0.004	8	0.5	0.2	0.2	0	0.08	mg/L
Ca	0.1	3500	80	5	5	750	752	mg/L
Cd	0.005	15	0.4	0.25	0.25	0	0.1	mg/L
Co	0.01	100	1	0.5	0.5	0	0.2	mg/L
Cr	0.01	100	1	0.5	0.5	0	0.2	mg/L
Cu	0.01	225	1	0.5	0.5	0	0.2	mg/L
Fe	0.1	1200	40	5	5	750	752	mg/L
K	2	1000	20	100	100	0	40	mg/L
Li	0.1	50	5	5	5	0	2	mg/L
Mg	0.1	1000	20	5	5	750	752	mg/L
Mn	0.01	20	2	0.5	0.5	0	0.2	mg/L
Mo	0.01	25	2	0.5	0.5	0	0.2	mg/L
Na	0.5	500	20	25	25	0	10	mg/L
Ni	0.01	100	2	0.5	0.5	0	0.2	mg/L
P	0.1	500	10	5	5	0	2	mg/L
Pb	0.01	200	0.5	0.5	0.5	0	0.2	mg/L
Sb	0.01	200	1	0.5	0.5	0	0.2	mg/L
Se	0.01	50	2	0.5	0.5	0	0.2	mg/L
Sn	0.04	125	5	2	2	0	0.8	mg/L
Sr	0.01	8	2	0.5	0.5	0	0.2	mg/L
Ti	0.05	64	5	2.5	2.5	0	1	mg/L
Tl	0.01	125	0.2	0.5	0.5	0	0.2	mg/L
V	0.02	100	2	1	1	0	0.4	mg/L
Zn	0.02	50	5	1	1	0	0.4	mg/L

Comments

Total and TCLP J1400360Z included in Run

Total and dissolved J1402025 included in Run

Tier IV includes J1402025

Reviewed By / Date: VF 3/24/14

ICP Run Sequence **Date File ID:** **032114A1**

#	Samp / Std ID	Date	Time	#	Samp / Std ID	Date	Time	#	Samp / Std ID	Date	Time
1	Calib Blank	3/21/14	17:42	56	J1402037-003	3/21/14	22:02				
2	Calib Std 1	3/21/14	17:47	57	MB-02092-01	3/21/14	22:07				
3	Calib Std 2	3/21/14	17:52	58	LCS-02092-02	3/21/14	22:11				
4	Calib Std 3	3/21/14	17:55	59	J1401847-003	3/21/14	22:15				
5	Calib Std 4	3/21/14	17:59	60	CCV	3/21/14	22:19				
6	ICV	3/21/14	18:02	61	CCB	3/21/14	22:23				
7	ICB	3/21/14	18:06	62	J1401935-002	3/21/14	22:28				
8	Blank	3/21/14	18:11	63	J1401935-003	3/21/14	22:33				
9	MRL	3/21/14	18:16	64	J1401935-003S	3/21/14	22:37				
10	ICSA	3/21/14	18:20	65	J1401935-003SD	3/21/14	22:40				
11	ICSAB	3/21/14	18:28	66	J1401935-003L	3/21/14	22:44				
12	CCV	3/21/14	18:36	67	J1401935-003A	3/21/14	22:48				
13	CCB	3/21/14	18:40	68	J1401935-004	3/21/14	22:53				
14	T1400360-002 2x	3/21/14	18:44	69	J1401935-005	3/21/14	22:58				
15	T1400365-001 5x	3/21/14	18:54	70	J1401935-006	3/21/14	23:03				
16	J1401993-001 2x	3/21/14	18:57	71	T1400360-003	3/21/14	23:08				
17	MB-02131-02	3/21/14	19:07	72	CCV	3/21/14	23:11				
18	LCS-02131-01	3/21/14	19:10	73	CCB	3/21/14	23:16				
19	J1402002-001	3/21/14	19:15	74	MB-02088-01	3/21/14	23:20				
20	J1402003-001	3/21/14	19:25	75	LCS-02088-02	3/21/14	23:24				
21	J1402003-002	3/21/14	19:30	76	J1401935-001	3/21/14	23:28				
22	J1402003-003	3/21/14	19:34	77	J1401935-001S	3/21/14	23:32				
23	J1402003-004	3/21/14	19:39	78	J1401935-001SD	3/21/14	23:35				
24	CCV	3/21/14	19:43	79	J1401935-001L	3/21/14	23:40				
25	CCB	3/21/14	19:47	80	J1401935-001A	3/21/14	23:43				
26	J1402005-001	3/21/14	19:52	81	T1400360-002	3/21/14	23:48				
27	J1402005-004	3/21/14	19:56	82	MB-02087-01	3/21/14	23:53				
28	J1402022-001	3/21/14	20:01	83	LCS-02087-02	3/21/14	23:56				
29	J1402022-002	3/21/14	20:06	84	CCV	3/21/14	23:59				
30	J1402022-003	3/21/14	20:11	85	CCB	3/22/14	00:04				
31	J1402022-004	3/21/14	20:16	86	J1401898-001	3/22/14	00:09				
32	J1402022-005	3/21/14	20:21	87	T1400360-001	3/22/14	00:14				
33	J1402025-001	3/21/14	20:26	88	MB-02130-02	3/22/14	00:19				
34	J1402025-002	3/21/14	20:31	89	LCS-02130-01	3/22/14	00:22				
35	J1402025-003	3/21/14	20:35	90	J1402025-001	3/22/14	00:27				
36	CCV	3/21/14	20:39	91	J1402025-002	3/22/14	00:32				
37	CCB	3/21/14	20:43	92	J1402025-002S	3/22/14	00:35				
38	J1402025-004	3/21/14	20:48	93	J1402025-002SD	3/22/14	00:38				
39	J1402025-005	3/21/14	20:53	94	J1402025-002L	3/22/14	00:43				
40	J1402025-006	3/21/14	20:58	95	J1402025-002A	3/22/14	00:46				
41	J1402025-007	3/21/14	21:03	96	CCV	3/22/14	00:49				
42	J1402025-007S	3/21/14	21:06	97	CCB	3/22/14	00:54				
43	J1402025-007SD	3/21/14	21:09	98	J1402025-003	3/22/14	00:59				
44	J1402025-007L	3/21/14	21:14	99	J1402025-004	3/22/14	01:04				
45	J1402025-007A	3/21/14	21:17	100	J1402025-005	3/22/14	01:09				
46	J1402037-001	3/21/14	21:22	101	J1402025-006	3/22/14	01:13				
47	MB-02132-02	3/21/14	21:27	102	J1402025-007	3/22/14	01:18				
48	CCV	3/21/14	21:30	103	ICSA	3/22/14	01:22				
49	CCB	3/21/14	21:35	104	ICSAB	3/22/14	01:30				
50	LCS-02132-01	3/21/14	21:38	105	CCV	3/22/14	01:38				
51	J1402037-002	3/21/14	21:43	106	CCB	3/22/14	01:42				
52	J1402037-002S	3/21/14	21:46								
53	J1402037-002SD	3/21/14	21:49								
54	J1402037-002L	3/21/14	21:54								
55	J1402037-002A	3/21/14	21:58								

NB

ICP DATA REPORTED WITH FAILING CRITERIA

Data File ID: 032114A1

Sample ID	Analyte	Failure(s)	Analyst's Comments

Reprocessing Begun
Logged In Analyst: ALJCK.NOUSER Technique: ICP Continuous

Results Data Set (original): 032114A
Results Library (original): C:\pe\JAXMET01\Results\1403.mdb
Results Data Set (reprocessed): 032114A1
Results Library (reprocessed): C:\pe\JAXMET01\Results\1403.mdb

Sequence No.: 1 Autosampler Location: 905
Sample ID: Calib Blank Date Collected: 3/21/2014 17:39:58
Analyst: Data Type: Reprocessed on 3/24/2014 09:27:01
Logged In Analyst (Original) : ALJCK.NOUSER
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: Calib Blank

Analyte	Back Pressure	Flow
All	220.0 kPa	0.68 L/min

Mean Data: Calib Blank

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029 Radial	602006.2	5560.56	0.92%	100.0	%
Y 371.029 Axial	12728428.4	102432.97	0.80%	100.0	%
Ag 328.068†	2637.2	64.15	2.43%	[0.00]	mg/L
Al 394.401†	-2386.9	13.84	0.58%	[0.00]	mg/L
As 188.979†	-22.2	1.06	4.78%	[0.00]	mg/L
B 208.956†	242.1	8.31	3.43%	[0.00]	mg/L
Ba 233.527†	-200.2	5.35	2.67%	[0.00]	mg/L
Be 313.107†	-14715.4	186.34	1.27%	[0.00]	mg/L
Ca 315.887†	-263.0	7.14	2.71%	[0.00]	mg/L
Cd 228.802†	158.0	4.30	2.72%	[0.00]	mg/L
Co 228.616†	148.0	17.10	11.55%	[0.00]	mg/L
Cr 267.716†	243.0	16.70	6.87%	[0.00]	mg/L
Cu 327.393†	794.9	49.23	6.19%	[0.00]	mg/L
Fe 273.955†	40.5	10.82	26.70%	[0.00]	mg/L
K 766.490 R†	1969.8	123.12	6.25%	[0.00]	mg/L
Mg 279.077†	-272.1	10.05	3.69%	[0.00]	mg/L
Mn 257.610†	578.2	30.49	5.27%	[0.00]	mg/L
Mo 202.031†	434.1	6.54	1.51%	[0.00]	mg/L
Na 589.592 R†	8364.4	208.74	2.50%	[0.00]	mg/L
Ni 231.604†	454.4	7.60	1.67%	[0.00]	mg/L
P 213.617†	-959.7	19.49	2.03%	[0.00]	mg/L
Pb 220.353†	-59.9	6.67	11.14%	[0.00]	mg/L
Sb 206.836†	40.7	1.17	2.88%	[0.00]	mg/L
Se 196.026†	-48.0	1.31	2.72%	[0.00]	mg/L
Sn 189.927†	-120.3	17.44	14.50%	[0.00]	mg/L
Sr 421.552R†	691.2	25.01	3.62%	[0.00]	mg/L
Ti 337.279†	2568.0	85.45	3.33%	[0.00]	mg/L
Tl 190.801†	-169.5	7.62	4.50%	[0.00]	mg/L
V 290.880†	1593.8	26.22	1.65%	[0.00]	mg/L
Zn 206.200†	136.7	51.24	37.50%	[0.00]	mg/L
Li 670.784†	65.0	134.21	206.37%	[0.00]	mg/L

Sequence No.: 2 Autosampler Location: 901
Sample ID: Calib Std 1 Date Collected: 3/21/2014 17:44:52
Analyst: Data Type: Reprocessed on 3/24/2014 09:27:06
Logged In Analyst (Original) : ALJCK.NOUSER
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: Calib Std 1

Analyte	Back Pressure	Flow
All	220.0 kPa	0.68 L/min

Mean Data: Calib Std 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029 Radial	587224.8	3155.36	0.54%	97.54	%
Y 371.029 Axial	12591560.7	128385.18	1.02%	98.92	%
Ag 328.068†	2682.9	114.69	4.27%	[0.01]	mg/L
Al 394.401†	99.6	14.74	14.81%	[0.1]	mg/L
As 188.979†	40.4	2.53	6.26%	[0.01]	mg/L
B 208.956†	864.0	3.96	0.46%	[0.05]	mg/L
Ba 233.527†	3036.4	12.36	0.41%	[0.01]	mg/L
Be 313.107†	13845.7	82.95	0.60%	[0.004]	mg/L
Ca 315.887†	842.9	10.96	1.30%	[0.1]	mg/L
Cd 228.802†	606.4	11.97	1.97%	[0.005]	mg/L
Co 228.616†	1159.1	29.94	2.58%	[0.01]	mg/L
Cr 267.716†	1367.2	7.34	0.54%	[0.01]	mg/L
Cu 327.393†	1843.1	46.10	2.50%	[0.01]	mg/L
Fe 273.955†	237.8	2.80	1.18%	[0.1]	mg/L
K 766.490 R†	14057.5	363.94	2.59%	[2]	mg/L
Mg 279.077†	127.5	8.70	6.82%	[0.1]	mg/L
Mn 257.610†	13079.1	108.58	0.83%	[0.01]	mg/L
Mo 202.031†	398.7	8.27	2.08%	[0.01]	mg/L
Na 589.592 R†	10422.2	33.34	0.32%	[0.5]	mg/L
Ni 231.604†	544.9	19.25	3.53%	[0.01]	mg/L
P 213.617†	588.4	13.79	2.34%	[0.1]	mg/L
Pb 220.353†	99.2	10.02	10.10%	[0.01]	mg/L
Sb 206.836†	36.2	3.61	9.96%	[0.01]	mg/L
Se 196.026†	27.1	5.98	22.04%	[0.01]	mg/L
Sn 189.927†	614.7	4.74	0.77%	[0.04]	mg/L
Sr 421.552R†	7937.9	56.37	0.71%	[0.01]	mg/L
Ti 337.279†	28696.6	210.55	0.73%	[0.05]	mg/L
Tl 190.801†	80.5	11.64	14.46%	[0.01]	mg/L
V 290.880†	3105.1	20.96	0.67%	[0.02]	mg/L
Zn 206.200†	1610.9	27.50	1.71%	[0.02]	mg/L
Li 670.784†	20657.6	89.42	0.43%	[0.1]	mg/L

Sequence No.: 3
Sample ID: Calib Std 2
Analyst:
Logged In Analyst (Original) : ALJCK.NOUSER
Initial Sample Wt:
Dilution:

Autosampler Location: 906
Date Collected: 3/21/2014 17:49:43
Data Type: Reprocessed on 3/24/2014 09:27:07
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: Calib Std 2

Analyte	Back Pressure	Flow
All	220.0 kPa	0.68 L/min

Mean Data: Calib Std 2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029 Radial	587777.6	5620.73	0.96%	97.64	%
Y 371.029 Axial	12574271.5	153166.65	1.22%	98.79	%
Ag 328.068†	27136.5	228.01	0.84%	[0.1]	mg/L
Al 394.401†	1787.0	8.44	0.47%	[1]	mg/L
As 188.979†	406.5	2.95	0.73%	[0.1]	mg/L
B 208.956†	8510.7	100.59	1.18%	[0.5]	mg/L
Ba 233.527†	30505.4	200.92	0.66%	[0.1]	mg/L
Be 313.107†	138819.3	1166.05	0.84%	[0.04]	mg/L
Ca 315.887†	8319.7	98.19	1.18%	[1]	mg/L
Cd 228.802†	6061.0	68.46	1.13%	[0.05]	mg/L
Co 228.616†	11435.3	110.76	0.97%	[0.1]	mg/L
Cr 267.716†	13333.9	152.39	1.14%	[0.1]	mg/L
Cu 327.393†	19761.1	209.59	1.06%	[0.1]	mg/L
Fe 273.955†	2243.3	22.24	0.99%	[1]	mg/L
K 766.490 R†	142042.5	194.71	0.14%	[20]	mg/L
Mg 279.077†	1334.1	31.47	2.36%	[1]	mg/L
Mn 257.610†	131758.8	1059.21	0.80%	[0.1]	mg/L
Mo 202.031†	3873.6	33.30	0.86%	[0.1]	mg/L
Na 589.592 R†	98196.4	127.12	0.13%	[5]	mg/L

Ni 231.604†	5324.1	54.43	1.02%	[0.1]	mg/L
P 213.617†	5870.4	41.89	0.71%	[1]	mg/L
Pb 220.353†	1101.4	11.76	1.07%	[0.1]	mg/L
Sb 206.836†	477.5	2.30	0.48%	[0.1]	mg/L
Se 196.026†	266.9	4.96	1.86%	[0.1]	mg/L
Sn 189.927†	6146.5	57.79	0.94%	[0.4]	mg/L
Sr 421.552R†	77618.8	151.24	0.19%	[0.1]	mg/L
Ti 337.279†	285387.2	2494.39	0.87%	[0.5]	mg/L
Tl 190.801†	888.1	14.91	1.68%	[0.1]	mg/L
V 290.880†	32220.3	219.53	0.68%	[0.2]	mg/L
Zn 206.200†	17698.1	188.98	1.07%	[0.2]	mg/L
Li 670.784†	201584.1	112.46	0.06%	[1]	mg/L

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Sequence No.: 4 **Autosampler Location: 904**
Sample ID: Calib Std 3 **Date Collected: 3/21/2014 17:54:34**
Analyst: **Data Type: Reprocessed on 3/24/2014 09:27:08**
Logged In Analyst (Original) : ALJCK.NOUSER
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: Calib Std 3

Analyte	Back Pressure	Flow
All	220.0 kPa	0.68 L/min

Mean Data: Calib Std 3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029 Radial	602360.9	5046.44	0.84%	100.1	%
Y 371.029 Axial	12339877.2	151435.98	1.23%	96.95	%
Ag 328.068†	137709.6	1255.29	0.91%	[0.5]	mg/L
Al 394.401†	9168.2	44.56	0.49%	[5]	mg/L
As 188.979†	2085.5	57.10	2.74%	[0.5]	mg/L
B 208.956†	42655.8	792.93	1.86%	[2.5]	mg/L
Ba 233.527†	152987.5	1252.67	0.82%	[0.5]	mg/L
Be 313.107†	713309.4	5644.53	0.79%	[0.2]	mg/L
Ca 315.887†	40688.0	346.13	0.85%	[5]	mg/L
Cd 228.802†	30485.8	543.84	1.78%	[0.25]	mg/L
Co 228.616†	56784.6	944.61	1.66%	[0.5]	mg/L
Cr 267.716†	66227.6	1134.01	1.71%	[0.5]	mg/L
Cu 327.393†	99189.4	1074.85	1.08%	[0.5]	mg/L
Fe 273.955†	10821.4	112.80	1.04%	[5]	mg/L
K 766.490 R†	701997.9	2094.28	0.30%	[100]	mg/L
Mg 279.077†	6490.0	45.34	0.70%	[5]	mg/L
Mn 257.610†	657694.2	5898.77	0.90%	[0.5]	mg/L
Mo 202.031†	19358.3	318.57	1.65%	[0.5]	mg/L
Na 589.592 R†	476547.7	892.47	0.19%	[25]	mg/L
Ni 231.604†	26529.6	537.96	2.03%	[0.5]	mg/L
P 213.617†	29883.1	451.00	1.51%	[5]	mg/L
Pb 220.353†	5486.0	85.16	1.55%	[0.5]	mg/L
Sb 206.836†	2437.8	31.29	1.28%	[0.5]	mg/L
Se 196.026†	1335.1	16.59	1.24%	[0.5]	mg/L
Sn 189.927†	30689.9	503.98	1.64%	[2]	mg/L
Sr 421.552R†	378553.9	1030.55	0.27%	[0.5]	mg/L
Ti 337.279†	1436322.3	13189.12	0.92%	[2.5]	mg/L
Tl 190.801†	4450.8	51.12	1.15%	[0.5]	mg/L
V 290.880†	163157.3	1424.77	0.87%	[1]	mg/L
Zn 206.200†	94261.7	792.13	0.84%	[1]	mg/L
Li 670.784†	982363.7	2425.24	0.25%	[5]	mg/L

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Sequence No.: 5 **Autosampler Location: 907**
Sample ID: Calib Std 4 **Date Collected: 3/21/2014 17:57:41**
Analyst: **Data Type: Reprocessed on 3/24/2014 09:27:08**
Logged In Analyst (Original) : ALJCK.NOUSER
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: Calib Std 4

Analyte	Back Pressure	Flow
All	220.0 kPa	0.68 L/min

Mean Data: Calib Std 4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029 Radial	590876.0	6767.67	1.15%	98.15	%
Y 371.029 Axial	12061030.4	781.52	0.01%	94.76	%
Ag 328.068†	276856.6	1313.73	0.47%	[1]	mg/L
Al 394.401†	18670.1	183.45	0.98%	[10]	mg/L
As 188.979†	4287.6	44.35	1.03%	[1]	mg/L
B 208.956†	89026.7	395.68	0.44%	[5]	mg/L
Ba 233.527†	304780.3	1142.87	0.37%	[1]	mg/L
Be 313.107†	1434328.8	5155.89	0.36%	[0.4]	mg/L
Ca 315.887†	82525.4	756.79	0.92%	[10]	mg/L
Cd 228.802†	61696.7	550.33	0.89%	[0.5]	mg/L
Co 228.616†	117789.6	303.99	0.26%	[1]	mg/L
Cr 267.716†	138057.7	645.14	0.47%	[1]	mg/L
Cu 327.393†	198505.1	827.11	0.42%	[1]	mg/L
Fe 273.955†	21927.3	184.91	0.84%	[10]	mg/L
K 766.490 R†	1412723.2	1505.48	0.11%	[200]	mg/L
Mg 279.077†	13140.3	87.21	0.66%	[10]	mg/L
Mn 257.610†	1311227.4	4836.20	0.37%	[1]	mg/L
Mo 202.031†	38984.9	238.17	0.61%	[1]	mg/L
Na 589.592 R†	953345.3	2460.31	0.26%	[50]	mg/L
Ni 231.604†	52995.6	268.59	0.51%	[1]	mg/L
P 213.617†	60864.4	466.35	0.77%	[10]	mg/L
Pb 220.353†	11010.0	55.69	0.51%	[1]	mg/L
Sb 206.836†	5003.4	55.29	1.10%	[1]	mg/L
Se 196.026†	2740.2	30.61	1.12%	[1]	mg/L
Sn 189.927†	61376.8	422.85	0.69%	[4]	mg/L
Sr 421.552R†	753387.5	2103.24	0.28%	[1]	mg/L
Ti 337.279†	2871525.5	14225.29	0.50%	[5]	mg/L
Tl 190.801†	8918.6	110.61	1.24%	[1]	mg/L
V 290.880†	326060.8	1201.30	0.37%	[2]	mg/L
Zn 206.200†	188232.1	370.26	0.20%	[2]	mg/L
Li 670.784†	1952344.1	7131.60	0.37%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin Thru 0	0.0	276500	0.00000	0.999996	
Al 394.401	4	Lin, Calc Int	-73.4	1869	0.00000	0.999963	
As 188.979	4	Wt. Lin	-1.5	4184	0.00000	0.999769	
B 208.956	4	Lin Thru 0	0.0	17650	0.00000	0.999854	
Ba 233.527	4	Wt. Lin	-17.1	305300	0.00000	0.999999	
Be 313.107	4	Wt. Lin	-365.4	3547000	0.00000	0.999904	
Ca 315.887	4	Wt. Lin	20.9	8226	0.00000	0.999961	
Cd 228.802	4	Wt. Lin	-5.3	122300	0.00000	0.999972	
Co 228.616	4	Wt. Lin	5.5	115200	0.00000	0.999860	
Cr 267.716	4	Wt. Lin	19.9	134600	0.00000	0.999811	
Cu 327.393	4	Wt. Lin	-144.5	198800	0.00000	1.000000	
Fe 273.955	4	Lin Thru 0	0.0	2188	0.00000	0.999984	
K 766.490 R	4	Lin Thru 0	0.0	7055	0.00000	0.999997	
Mg 279.077	4	Lin Thru 0	0.0	1311	0.00000	0.999987	
Mn 257.610	4	Wt. Lin	-67.1	1315000	0.00000	0.999997	
Mo 202.031	4	Wt. Lin	10.9	38770	0.00000	0.999992	
Na 589.592 R	4	Lin Thru 0	0.0	19070	0.00000	0.999996	
Ni 231.604	4	Wt. Lin	14.7	53030	0.00000	1.000000	
P 213.617	4	Wt. Lin	-11.1	5986	0.00000	0.999891	
Pb 220.353	4	Lin Thru 0	0.0	11000	0.00000	0.999999	
Sb 206.836	4	Wt. Lin	-13.2	4943	0.00000	0.999937	
Se 196.026	4	Lin, Calc Int	-6.5	2734	0.00000	0.999920	
Sn 189.927	4	Wt. Lin	0.7	15350	0.00000	1.000000	
Sr 421.552R	4	Lin Thru 0	0.0	754300	0.00000	0.999995	
Ti 337.279	4	Wt. Lin	23.0	573300	0.00000	0.999995	
Tl 190.801	4	Wt. Lin	-8.9	8938	0.00000	0.999997	
V 290.880	4	Wt. Lin	-152.2	162800	0.00000	0.999991	
Zn 206.200	4	Lin Thru 0	0.0	94100	0.00000	0.999985	
Li 670.784	4	Wt. Lin	962.6	197200	0.00000	0.999921	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
Calib Blank	Y	Ag	[0.00]	1	[0.00]	3/21/2014	17:42	ICAL		
Calib Blank	Y	Al	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	As	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	B	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Ba	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Be	[0.00]	1	[0.00]	3/21/2014	17:42	ICAL		
Calib Blank	Y	Ca	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	Cd	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Co	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Cr	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Cu	[0.00]	1	[0.00]	3/21/2014	17:42	ICAL		
Calib Blank	Y	Fe	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	K	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	Li	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	Mg	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	Mn	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Mo	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Na	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	Ni	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	P	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Pb	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Sb	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Se	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Sn	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Sr	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	Ti	[0.00]	1	[0.00]	3/21/2014	17:42	ICAL		
Calib Blank	Y	Tl	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	V	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Zn	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Std 1	Y	Ag	[0.01]	1	98.92	3/21/2014	17:47	ICAL		
Calib Std 1	Y	Al	[0.1]	1	97.54	3/21/2014	17:46	ICAL		
Calib Std 1	Y	As	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	B	[0.05]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Ba	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Be	[0.004]	1	98.92	3/21/2014	17:47	ICAL		
Calib Std 1	Y	Ca	[0.1]	1	97.54	3/21/2014	17:46	ICAL		
Calib Std 1	Y	Cd	[0.005]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Co	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Cr	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Cu	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Fe	[0.1]	1	97.54	3/21/2014	17:46	ICAL		
Calib Std 1	Y	K	[2]	1	97.54	3/21/2014	17:46	ICAL		
Calib Std 1	Y	Li	[0.1]	1	98.92	3/21/2014	17:46	ICAL		
Calib Std 1	Y	Mg	[0.1]	1	97.54	3/21/2014	17:46	ICAL		
Calib Std 1	Y	Mn	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Mo	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Na	[0.5]	1	97.54	3/21/2014	17:46	ICAL		
Calib Std 1	Y	Ni	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	P	[0.1]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Pb	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Sb	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Se	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Sn	[0.04]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Sr	[0.01]	1	97.54	3/21/2014	17:46	ICAL		
Calib Std 1	Y	Ti	[0.05]	1	98.92	3/21/2014	17:47	ICAL		
Calib Std 1	Y	Tl	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	V	[0.02]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Zn	[0.02]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 2	Y	Ag	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Al	[1]	1	97.64	3/21/2014	17:51	ICAL		
Calib Std 2	Y	As	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	B	[0.5]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Ba	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Be	[0.04]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Ca	[1]	1	97.64	3/21/2014	17:51	ICAL		
Calib Std 2	Y	Cd	[0.05]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Co	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Cr	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Cu	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Fe	[1]	1	97.64	3/21/2014	17:51	ICAL		
Calib Std 2	Y	K	[20]	1	97.64	3/21/2014	17:51	ICAL		
Calib Std 2	Y	Li	[1]	1	98.79	3/21/2014	17:51	ICAL		
Calib Std 2	Y	Mg	[1]	1	97.64	3/21/2014	17:51	ICAL		
Calib Std 2	Y	Mn	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Mo	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Na	[5]	1	97.64	3/21/2014	17:51	ICAL		
Calib Std 2	Y	Ni	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	P	[1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Pb	[0.1]	1	98.79	3/21/2014	17:52	ICAL		

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
Calib Std 2	Y	Sb	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Se	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Sn	[0.4]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Sr	[0.1]	1	97.64	3/21/2014	17:51	ICAL		
Calib Std 2	Y	Ti	[0.5]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Tl	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	V	[0.2]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Zn	[0.2]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 3	Y	Ag	[0.5]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Al	[5]	1	100.1	3/21/2014	17:55	ICAL		
Calib Std 3	Y	As	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	B	[2.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Ba	[0.5]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Be	[0.2]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Ca	[5]	1	100.1	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Cd	[0.25]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Co	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Cr	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Cu	[0.5]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Fe	[5]	1	100.1	3/21/2014	17:55	ICAL		
Calib Std 3	Y	K	[100]	1	100.1	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Li	[5]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Mg	[5]	1	100.1	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Mn	[0.5]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Mo	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Na	[25]	1	100.1	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Ni	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	P	[5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Pb	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Sb	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Se	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Sn	[2]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Sr	[0.5]	1	100.1	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Ti	[2.5]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Tl	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	V	[1]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Zn	[1]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 4	Y	Ag	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Al	[10]	1	98.15	3/21/2014	17:58	ICAL		
Calib Std 4	Y	As	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	B	[5]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Ba	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Be	[0.4]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Ca	[10]	1	98.15	3/21/2014	17:58	ICAL		
Calib Std 4	Y	Cd	[0.5]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Co	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Cr	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Cu	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Fe	[10]	1	98.15	3/21/2014	17:58	ICAL		
Calib Std 4	Y	K	[200]	1	98.15	3/21/2014	17:58	ICAL		
Calib Std 4	Y	Li	[10]	1	94.76	3/21/2014	17:58	ICAL		
Calib Std 4	Y	Mg	[10]	1	98.15	3/21/2014	17:58	ICAL		
Calib Std 4	Y	Mn	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Mo	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Na	[50]	1	98.15	3/21/2014	17:58	ICAL		
Calib Std 4	Y	Ni	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	P	[10]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Pb	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Sb	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Se	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Sn	[4]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Sr	[1]	1	98.15	3/21/2014	17:58	ICAL		
Calib Std 4	Y	Ti	[5]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Tl	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	V	[2]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Zn	[2]	1	94.76	3/21/2014	17:59	ICAL		
ICV	Y	Ag	0.504	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Al	50.080	1	99.6	3/21/2014	18:01	ICV		
ICV	Y	As	1.001	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	B	3.937	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Ba	1.967	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Be	0.502	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Ca	80.620	1	99.6	3/21/2014	18:01	ICV		
ICV	Y	Cd	0.399	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Co	1.002	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Cr	1.015	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Cu	1.000	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Fe	39.160	1	99.6	3/21/2014	18:01	ICV		
ICV	Y	K	20.640	1	99.6	3/21/2014	18:01	ICV		

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
ICV	Y	Li	5.127	1	95.89	3/21/2014	18:01	ICV		
ICV	Y	Mg	19.710	1	99.6	3/21/2014	18:01	ICV		
ICV	Y	Mn	1.960	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Mo	1.971	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Na	20.590	1	99.6	3/21/2014	18:01	ICV		
ICV	Y	Ni	2.014	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	P	9.872	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Pb	0.492	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Sb	0.991	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Se	1.988	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Sn	4.863	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Sr	2.017	1	99.6	3/21/2014	18:01	ICV		
ICV	Y	Ti	4.920	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Tl	0.203	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	V	1.994	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Zn	4.823	1	95.89	3/21/2014	18:02	ICV		
ICB	Y	Ag	0.000	1	99.41	3/21/2014	18:06	CCB		
ICB	Y	Al	-0.034	1	97.16	3/21/2014	18:05	CCB		
ICB	Y	As	-0.001	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	B	0.023	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Ba	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Be	0.000	1	99.41	3/21/2014	18:06	CCB		
ICB	Y	Ca	-0.006	1	97.16	3/21/2014	18:05	CCB		
ICB	Y	Cd	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Co	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Cr	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Cu	0.001	1	99.41	3/21/2014	18:06	CCB		
ICB	Y	Fe	0.001	1	97.16	3/21/2014	18:05	CCB		
ICB	Y	K	0.055	1	97.16	3/21/2014	18:05	CCB		
ICB	Y	Li	-0.005	1	99.41	3/21/2014	18:05	CCB		
ICB	Y	Mg	-0.018	1	97.16	3/21/2014	18:05	CCB		
ICB	Y	Mn	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Mo	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Na	0.019	1	97.16	3/21/2014	18:05	CCB		
ICB	Y	Ni	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	P	-0.005	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Pb	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Sb	0.001	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Se	0.002	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Sn	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Sr	0.000	1	97.16	3/21/2014	18:05	CCB		
ICB	Y	Ti	0.000	1	99.41	3/21/2014	18:06	CCB		
ICB	Y	Tl	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	V	0.001	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Zn	-0.003	1	99.41	3/21/2014	18:07	CCB		
Blank	N	Ag	0.000	1	99.31	3/21/2014	18:11	MISC		
Blank	N	Al	-0.044	1	96.87	3/21/2014	18:10	MISC		
Blank	N	As	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	B	0.015	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Ba	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Be	0.000	1	99.31	3/21/2014	18:11	MISC		
Blank	N	Ca	-0.006	1	96.87	3/21/2014	18:10	MISC		
Blank	N	Cd	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Co	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Cr	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Cu	0.001	1	99.31	3/21/2014	18:11	MISC		
Blank	N	Fe	0.000	1	96.87	3/21/2014	18:10	MISC		
Blank	N	K	-0.001	1	96.87	3/21/2014	18:10	MISC		
Blank	N	Li	-0.005	1	99.31	3/21/2014	18:10	MISC		
Blank	N	Mg	-0.013	1	96.87	3/21/2014	18:10	MISC		
Blank	N	Mn	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Mo	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Na	0.023	1	96.87	3/21/2014	18:10	MISC		
Blank	N	Ni	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	P	-0.002	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Pb	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Sb	0.001	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Se	0.003	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Sn	-0.001	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Sr	0.000	1	96.87	3/21/2014	18:10	MISC		
Blank	N	Ti	0.000	1	99.31	3/21/2014	18:11	MISC		
Blank	N	Tl	-0.001	1	99.31	3/21/2014	18:12	MISC		
Blank	N	V	0.001	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Zn	-0.003	1	99.31	3/21/2014	18:12	MISC		
MRL	Y	Ag	0.010	1	99.46	3/21/2014	18:16	MRL		
MRL	Y	Al	0.069	1	97.54	3/21/2014	18:15	MRL		MRL FL.
MRL	Y	As	0.009	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	B	0.062	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Ba	0.010	1	99.46	3/21/2014	18:17	MRL		

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
MRL	Y	Be	0.004	1	99.46	3/21/2014	18:16	MRL		
MRL	Y	Ca	0.099	1	97.54	3/21/2014	18:15	MRL		
MRL	Y	Cd	0.005	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Co	0.010	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Cr	0.010	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Cu	0.011	1	99.46	3/21/2014	18:16	MRL		
MRL	Y	Fe	0.106	1	97.54	3/21/2014	18:15	MRL		
MRL	Y	K	2.028	1	97.54	3/21/2014	18:15	MRL		
MRL	Y	Li	0.099	1	99.46	3/21/2014	18:15	MRL		
MRL	Y	Mg	0.096	1	97.54	3/21/2014	18:15	MRL		
MRL	Y	Mn	0.010	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Mo	0.010	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Na	0.546	1	97.54	3/21/2014	18:15	MRL		
MRL	Y	Ni	0.010	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	P	0.095	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Pb	0.010	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Sb	0.011	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Se	0.012	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Sn	0.040	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Sr	0.011	1	97.54	3/21/2014	18:15	MRL		
MRL	Y	Ti	0.050	1	99.46	3/21/2014	18:16	MRL		
MRL	Y	Tl	0.010	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	V	0.019	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Zn	0.017	1	99.46	3/21/2014	18:17	MRL		
ICSA	Y	Ag	-0.005	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Al	753.100	1	92.14	3/21/2014	18:19	ICS-A		
ICSA	Y	As	-0.001	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	B	0.053	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Ba	-0.001	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Be	0.002	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Ca	703.600	1	92.14	3/21/2014	18:19	ICS-A		
ICSA	Y	Cd	0.008	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Co	0.016	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Cr	-0.003	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Cu	0.002	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Fe	668.200	1	92.14	3/21/2014	18:19	ICS-A		
ICSA	Y	K	0.192	1	92.14	3/21/2014	18:19	ICS-A		
ICSA	Y	Li	-0.006	1	86.49	3/21/2014	18:19	ICS-A		
ICSA	Y	Mg	697.800	1	92.14	3/21/2014	18:19	ICS-A		
ICSA	Y	Mn	-0.012	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Mo	0.013	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Na	0.034	1	92.14	3/21/2014	18:19	ICS-A		
ICSA	Y	Ni	0.016	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	P	-0.014	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Pb	-0.006	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Sb	-0.017	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Se	0.000	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Sn	0.034	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Sr	-0.002	1	92.14	3/21/2014	18:19	ICS-A		
ICSA	Y	Ti	0.003	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Tl	-0.001	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	V	-0.010	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Zn	0.026	1	86.49	3/21/2014	18:20	ICS-A		
ICSAB	Y	Ag	0.209	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Al	766.500	1	93.11	3/21/2014	18:27	ICS-AB		
ICSAB	Y	As	0.216	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	B	1.033	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Ba	0.190	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Be	0.082	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Ca	694.100	1	93.11	3/21/2014	18:27	ICS-AB		
ICSAB	Y	Cd	0.114	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Co	0.203	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Cr	0.192	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Cu	0.213	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Fe	677.100	1	93.11	3/21/2014	18:27	ICS-AB		
ICSAB	Y	K	46.010	1	93.11	3/21/2014	18:27	ICS-AB		
ICSAB	Y	Li	2.246	1	86.05	3/21/2014	18:27	ICS-AB		
ICSAB	Y	Mg	703.700	1	93.11	3/21/2014	18:27	ICS-AB		
ICSAB	Y	Mn	0.186	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Mo	0.209	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Na	11.210	1	93.11	3/21/2014	18:27	ICS-AB		
ICSAB	Y	Ni	0.202	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	P	2.057	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Pb	0.177	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Sb	0.197	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Se	0.207	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Sn	0.797	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Sr	0.205	1	93.11	3/21/2014	18:27	ICS-AB		
ICSAB	Y	Ti	1.029	1	86.05	3/21/2014	18:28	ICS-AB		

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
ICSAB	Y	Tl	0.190	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	V	0.393	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Zn	0.387	1	86.05	3/21/2014	18:28	ICS-AB		
CCV	Y	Ag	0.496	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Al	4.980	1	98.25	3/21/2014	18:35	CCV		
CCV	Y	As	0.500	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	B	2.434	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Ba	0.499	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Be	0.201	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Ca	5.053	1	98.25	3/21/2014	18:35	CCV		
CCV	Y	Cd	0.248	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Co	0.494	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Cr	0.496	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Cu	0.494	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Fe	5.081	1	98.25	3/21/2014	18:35	CCV		
CCV	Y	K	99.770	1	98.25	3/21/2014	18:35	CCV		
CCV	Y	Li	4.969	1	96.15	3/21/2014	18:35	CCV		
CCV	Y	Mg	5.082	1	98.25	3/21/2014	18:35	CCV		
CCV	Y	Mn	0.501	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Mo	0.502	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Na	25.120	1	98.25	3/21/2014	18:35	CCV		
CCV	Y	Ni	0.505	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	P	4.992	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Pb	0.498	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Sb	0.498	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Se	0.502	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Sn	2.024	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Sr	0.501	1	98.25	3/21/2014	18:35	CCV		
CCV	Y	Ti	2.519	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Tl	0.499	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	V	0.997	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Zn	1.007	1	96.15	3/21/2014	18:36	CCV		
CCB	Y	Ag	0.001	1	98.34	3/21/2014	18:40	CCB		
CCB	Y	Al	-0.054	1	96.45	3/21/2014	18:39	CCB		
CCB	Y	As	-0.001	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	B	0.014	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Ba	0.000	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Be	0.000	1	98.34	3/21/2014	18:40	CCB		
CCB	Y	Ca	-0.005	1	96.45	3/21/2014	18:39	CCB		
CCB	Y	Cd	0.000	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Co	0.000	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Cr	0.000	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Cu	0.000	1	98.34	3/21/2014	18:40	CCB		
CCB	Y	Fe	0.002	1	96.45	3/21/2014	18:39	CCB		
CCB	Y	K	0.006	1	96.45	3/21/2014	18:39	CCB		
CCB	Y	Li	-0.005	1	98.34	3/21/2014	18:39	CCB		
CCB	Y	Mg	-0.017	1	96.45	3/21/2014	18:39	CCB		
CCB	Y	Mn	0.000	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Mo	0.001	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Na	0.021	1	96.45	3/21/2014	18:39	CCB		
CCB	Y	Ni	0.000	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	P	-0.007	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Pb	-0.001	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Sb	0.001	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Se	0.003	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Sn	-0.002	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Sr	0.000	1	96.45	3/21/2014	18:39	CCB		
CCB	Y	Ti	0.000	1	98.34	3/21/2014	18:40	CCB		
CCB	Y	Tl	0.000	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	V	0.001	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Zn	-0.003	1	98.34	3/21/2014	18:41	CCB		
T1400360-002 2x	Y	Ag	0.023	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Al	70.930	2	91.67	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	As	0.069	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	B	0.151	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Ba	0.084	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Be	0.005	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Ca	3041.000	2	91.67	3/21/2014	18:43	SAMP	6010 S	
T1400360-002 2x	Y	Cd	0.004	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Co	0.029	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Cr	0.302	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Cu	0.145	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Fe	128.900	2	91.67	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	K	24.600	2	91.67	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Li	0.156	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Mg	24.270	2	91.67	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Mn	1.875	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Mo	0.017	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Na	5.076	2	91.67	3/21/2014	18:44	SAMP	6010 S	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402003-003	Y	Sn	-0.003	1	101.1	3/21/2014	19:35	SAMP	200.7 W	
J1402003-003	Y	Sr	0.005	1	98.78	3/21/2014	19:33	SAMP	200.7 W	
J1402003-003	Y	Ti	0.272	1	101.1	3/21/2014	19:34	SAMP	200.7 W	
J1402003-003	Y	Tl	-0.001	1	101.1	3/21/2014	19:35	SAMP	200.7 W	
J1402003-003	Y	V	0.005	1	101.1	3/21/2014	19:35	SAMP	200.7 W	
J1402003-003	Y	Zn	0.007	1	101.1	3/21/2014	19:35	SAMP	200.7 W	
J1402003-004	Y	Ag	0.000	1	101.9	3/21/2014	19:39	SAMP	200.7 W	
J1402003-004	Y	Al	0.198	1	99.98	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	As	0.000	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	B	0.017	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Ba	0.009	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Be	0.000	1	101.9	3/21/2014	19:39	SAMP	200.7 W	
J1402003-004	Y	Ca	0.326	1	99.98	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	Cd	0.000	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Co	0.001	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Cr	0.006	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Cu	0.001	1	101.9	3/21/2014	19:39	SAMP	200.7 W	
J1402003-004	Y	Fe	0.071	1	99.98	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	K	0.045	1	99.98	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	Li	-0.005	1	101.9	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	Mg	0.346	1	99.98	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	Mn	0.009	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Mo	0.000	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Na	1.709	1	99.98	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	Ni	0.000	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	P	0.005	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Pb	-0.001	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Sb	0.001	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Se	0.004	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Sn	-0.002	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Sr	0.005	1	99.98	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	Ti	0.001	1	101.9	3/21/2014	19:39	SAMP	200.7 W	
J1402003-004	Y	Tl	0.000	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	V	0.001	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Zn	0.002	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
CCV	Y	Ag	0.488	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Al	4.897	1	98.06	3/21/2014	19:42	CCV		
CCV	Y	As	0.500	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	B	2.418	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Ba	0.490	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Be	0.196	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Ca	4.947	1	98.06	3/21/2014	19:42	CCV		
CCV	Y	Cd	0.247	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Co	0.490	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Cr	0.493	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Cu	0.485	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Fe	4.975	1	98.06	3/21/2014	19:42	CCV		
CCV	Y	K	100.200	1	98.06	3/21/2014	19:42	CCV		
CCV	Y	Li	4.975	1	96.64	3/21/2014	19:42	CCV		
CCV	Y	Mg	4.980	1	98.06	3/21/2014	19:42	CCV		
CCV	Y	Mn	0.489	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Mo	0.499	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Na	25.220	1	98.06	3/21/2014	19:42	CCV		
CCV	Y	Ni	0.502	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	P	4.955	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Pb	0.498	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Sb	0.501	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Se	0.498	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Sn	2.014	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Sr	0.501	1	98.06	3/21/2014	19:42	CCV		
CCV	Y	Ti	2.446	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Tl	0.494	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	V	0.974	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Zn	0.988	1	96.64	3/21/2014	19:43	CCV		
CCB	Y	Ag	0.000	1	98.34	3/21/2014	19:47	CCB		
CCB	Y	Al	-0.062	1	95.45	3/21/2014	19:46	CCB		
CCB	Y	As	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	B	0.011	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Ba	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Be	0.000	1	98.34	3/21/2014	19:47	CCB		
CCB	Y	Ca	-0.004	1	95.45	3/21/2014	19:46	CCB		
CCB	Y	Cd	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Co	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Cr	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Cu	0.000	1	98.34	3/21/2014	19:47	CCB		
CCB	Y	Fe	0.001	1	95.45	3/21/2014	19:46	CCB		
CCB	Y	K	0.043	1	95.45	3/21/2014	19:46	CCB		
CCB	Y	Li	-0.005	1	98.34	3/21/2014	19:46	CCB		
CCB	Y	Mg	-0.027	1	95.45	3/21/2014	19:46	CCB		

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
CCB	Y	Mn	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Mo	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Na	0.036	1	95.45	3/21/2014	19:46	CCB		
CCB	Y	Ni	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	P	-0.007	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Pb	-0.001	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Sb	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Se	0.002	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Sn	-0.003	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Sr	0.000	1	95.45	3/21/2014	19:46	CCB		
CCB	Y	Ti	0.000	1	98.34	3/21/2014	19:47	CCB		
CCB	Y	Tl	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	V	0.001	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Zn	-0.003	1	98.34	3/21/2014	19:48	CCB		
J1402005-001	Y	Ag	0.001	1	98.12	3/21/2014	19:52	SAMP	200.7 W	
J1402005-001	Y	Al	0.129	1	100.6	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	As	0.004	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	B	0.169	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Ba	0.011	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Be	0.000	1	98.12	3/21/2014	19:52	SAMP	200.7 W	
J1402005-001	Y	Ca	65.910	1	100.6	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	Cd	0.000	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Co	0.000	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Cr	0.000	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Cu	0.006	1	98.12	3/21/2014	19:52	SAMP	200.7 W	
J1402005-001	Y	Fe	0.092	1	100.6	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	K	9.972	1	100.6	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	Li	-0.002	1	98.12	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	Mg	21.920	1	100.6	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	Mn	0.017	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Mo	0.002	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Na	72.370	1	100.6	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	Ni	0.001	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	P	0.834	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Pb	-0.005	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Sb	0.001	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Se	0.001	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Sn	0.013	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Sr	1.313	1	100.6	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	Ti	0.001	1	98.12	3/21/2014	19:52	SAMP	200.7 W	
J1402005-001	Y	Tl	0.001	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	V	0.006	1	98.12	3/21/2014	19:52	SAMP	200.7 W	
J1402005-001	Y	Zn	0.040	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-004	Y	Ag	0.001	1	100.3	3/21/2014	19:56	SAMP	200.7 W	
J1402005-004	Y	Al	0.648	1	101.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	As	0.006	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	B	0.141	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Ba	0.039	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Be	0.000	1	100.3	3/21/2014	19:56	SAMP	200.7 W	
J1402005-004	Y	Ca	66.420	1	101.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	Cd	0.000	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Co	0.001	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Cr	0.003	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Cu	0.034	1	100.3	3/21/2014	19:56	SAMP	200.7 W	
J1402005-004	Y	Fe	1.100	1	101.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	K	8.958	1	101.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	Li	-0.002	1	100.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	Mg	19.230	1	101.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	Mn	0.020	1	100.3	3/21/2014	19:56	SAMP	200.7 W	
J1402005-004	Y	Mo	0.003	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Na	59.050	1	101.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	Ni	0.003	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	P	4.181	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Pb	-0.001	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Sb	0.000	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Se	0.002	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Sn	0.016	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Sr	1.094	1	101.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	Ti	0.014	1	100.3	3/21/2014	19:56	SAMP	200.7 W	
J1402005-004	Y	Tl	0.000	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	V	0.007	1	100.3	3/21/2014	19:56	SAMP	200.7 W	
J1402005-004	Y	Zn	0.124	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402022-001	Y	Ag	0.001	1	99.42	3/21/2014	20:01	SAMP	6010 W	
J1402022-001	Y	Al	0.305	1	98.09	3/21/2014	20:00	SAMP	6010 W	
J1402022-001	Y	As	0.015	1	99.42	3/21/2014	20:01	SAMP	6010 W	
J1402022-001	Y	B	0.039	1	99.42	3/21/2014	20:01	SAMP	6010 W	
J1402022-001	Y	Ba	0.094	1	99.42	3/21/2014	20:01	SAMP	6010 W	
J1402022-001	Y	Be	0.000	1	99.42	3/21/2014	20:01	SAMP	6010 W	
J1402022-001	Y	Ca	66.010	1	98.09	3/21/2014	20:00	SAMP	6010 W	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402022-003	Y	Zn	0.053	1	100.2	3/21/2014	20:11	SAMP	6010 W	
J1402022-004	Y	Ag	0.001	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Al	1.052	1	101.8	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	As	0.006	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	B	0.340	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Ba	0.052	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Be	0.000	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Ca	54.020	1	101.8	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	Cd	0.000	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Co	0.001	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Cr	0.001	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Cu	0.003	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Fe	0.793	1	101.8	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	K	12.100	1	101.8	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	Li	-0.005	1	98.62	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	Mg	12.670	1	101.8	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	Mn	0.031	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Mo	0.005	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Na	71.960	1	101.8	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	Ni	0.006	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	P	0.160	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Pb	-0.002	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Sb	-0.001	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Se	0.000	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Sn	0.012	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Sr	0.914	1	101.8	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	Ti	0.011	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Tl	0.002	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	V	0.062	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Zn	0.028	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-005	Y	Ag	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Al	0.021	1	100.4	3/21/2014	20:20	SAMP	6010 W	
J1402022-005	Y	As	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	B	0.007	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Ba	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Be	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Ca	-0.001	1	100.4	3/21/2014	20:20	SAMP	6010 W	
J1402022-005	Y	Cd	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Co	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Cr	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Cu	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Fe	0.000	1	100.4	3/21/2014	20:20	SAMP	6010 W	
J1402022-005	Y	K	-0.001	1	100.4	3/21/2014	20:19	SAMP	6010 W	
J1402022-005	Y	Li	-0.005	1	101.1	3/21/2014	20:19	SAMP	6010 W	
J1402022-005	Y	Mg	0.001	1	100.4	3/21/2014	20:20	SAMP	6010 W	
J1402022-005	Y	Mn	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Mo	-0.001	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Na	0.020	1	100.4	3/21/2014	20:19	SAMP	6010 W	
J1402022-005	Y	Ni	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	P	-0.001	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Pb	-0.001	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Sb	-0.001	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Se	0.003	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Sn	-0.002	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Sr	0.000	1	100.4	3/21/2014	20:19	SAMP	6010 W	
J1402022-005	Y	Ti	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Tl	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	V	0.001	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Zn	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402025-001	Y	Ag	0.001	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Al	0.192	1	98.96	3/21/2014	20:25	SAMP	6010 W	
J1402025-001	Y	As	0.002	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	B	0.021	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Ba	0.013	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Be	0.000	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Ca	51.710	1	98.96	3/21/2014	20:24	SAMP	6010 W	
J1402025-001	Y	Cd	0.000	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Co	0.001	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Cr	0.004	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Cu	0.002	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Fe	0.265	1	98.96	3/21/2014	20:25	SAMP	6010 W	
J1402025-001	Y	K	1.388	1	98.96	3/21/2014	20:24	SAMP	6010 W	
J1402025-001	Y	Li	-0.004	1	99.75	3/21/2014	20:24	SAMP	6010 W	
J1402025-001	Y	Mg	1.571	1	98.96	3/21/2014	20:25	SAMP	6010 W	
J1402025-001	Y	Mn	0.001	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Mo	0.005	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Na	1.613	1	98.96	3/21/2014	20:24	SAMP	6010 W	
J1402025-001	Y	Ni	0.000	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	P	0.011	1	99.75	3/21/2014	20:26	SAMP	6010 W	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-001	Y	Pb	-0.005	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Sb	0.001	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Se	0.002	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Sn	0.012	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Sr	0.142	1	98.96	3/21/2014	20:24	SAMP	6010 W	
J1402025-001	Y	Ti	0.006	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Tl	0.001	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	V	0.005	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Zn	0.000	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-002	Y	Ag	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Al	0.096	1	98.1	3/21/2014	20:30	SAMP	6010 W	
J1402025-002	Y	As	0.003	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	B	0.026	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Ba	0.009	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Be	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Ca	31.290	1	98.1	3/21/2014	20:29	SAMP	6010 W	
J1402025-002	Y	Cd	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Co	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Cr	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Cu	0.001	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Fe	0.909	1	98.1	3/21/2014	20:30	SAMP	6010 W	
J1402025-002	Y	K	0.952	1	98.1	3/21/2014	20:29	SAMP	6010 W	
J1402025-002	Y	Li	-0.003	1	99.53	3/21/2014	20:29	SAMP	6010 W	
J1402025-002	Y	Mg	15.340	1	98.1	3/21/2014	20:30	SAMP	6010 W	
J1402025-002	Y	Mn	0.027	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Mo	0.004	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Na	6.739	1	98.1	3/21/2014	20:29	SAMP	6010 W	
J1402025-002	Y	Ni	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	P	0.068	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Pb	-0.003	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Sb	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Se	0.003	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Sn	0.008	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Sr	0.051	1	98.1	3/21/2014	20:29	SAMP	6010 W	
J1402025-002	Y	Ti	0.001	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Tl	0.001	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	V	0.003	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Zn	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-003	Y	Ag	0.001	1	99.22	3/21/2014	20:35	SAMP	6010 W	
J1402025-003	Y	Al	0.068	1	98.56	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	As	0.003	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	B	0.018	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Ba	0.000	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Be	0.000	1	99.22	3/21/2014	20:35	SAMP	6010 W	
J1402025-003	Y	Ca	23.420	1	98.56	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	Cd	0.000	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Co	0.000	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Cr	0.000	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Cu	0.001	1	99.22	3/21/2014	20:35	SAMP	6010 W	
J1402025-003	Y	Fe	0.830	1	98.56	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	K	1.024	1	98.56	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	Li	-0.004	1	99.22	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	Mg	10.290	1	98.56	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	Mn	0.025	1	99.22	3/21/2014	20:35	SAMP	6010 W	
J1402025-003	Y	Mo	0.007	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Na	5.416	1	98.56	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	Ni	0.000	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	P	0.213	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Pb	-0.004	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Sb	0.000	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Se	0.001	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Sn	0.005	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Sr	0.034	1	98.56	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	Ti	0.001	1	99.22	3/21/2014	20:35	SAMP	6010 W	
J1402025-003	Y	Tl	0.000	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	V	0.003	1	99.22	3/21/2014	20:35	SAMP	6010 W	
J1402025-003	Y	Zn	0.002	1	99.22	3/21/2014	20:36	SAMP	6010 W	
CCV	Y	Ag	0.490	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Al	4.887	1	97.55	3/21/2014	20:38	CCV		
CCV	Y	As	0.509	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	B	2.440	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Ba	0.493	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Be	0.197	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Ca	4.972	1	97.55	3/21/2014	20:38	CCV		
CCV	Y	Cd	0.250	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Co	0.496	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Cr	0.499	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Cu	0.488	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Fe	4.982	1	97.55	3/21/2014	20:38	CCV		

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
CCV	Y	K	100.400	1	97.55	3/21/2014	20:38	CCV		
CCV	Y	Li	4.982	1	95.82	3/21/2014	20:38	CCV		
CCV	Y	Mg	4.987	1	97.55	3/21/2014	20:38	CCV		
CCV	Y	Mn	0.493	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Mo	0.505	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Na	25.250	1	97.55	3/21/2014	20:38	CCV		
CCV	Y	Ni	0.508	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	P	5.017	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Pb	0.498	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Sb	0.508	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Se	0.503	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Sn	2.035	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Sr	0.501	1	97.55	3/21/2014	20:38	CCV		
CCV	Y	Ti	2.460	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Tl	0.499	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	V	0.980	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Zn	0.994	1	95.82	3/21/2014	20:39	CCV		
CCB	Y	Ag	0.001	1	98.39	3/21/2014	20:43	CCB		
CCB	Y	Al	-0.072	1	95.46	3/21/2014	20:42	CCB		
CCB	Y	As	-0.001	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	B	0.005	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Ba	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Be	0.000	1	98.39	3/21/2014	20:43	CCB		
CCB	Y	Ca	-0.002	1	95.46	3/21/2014	20:42	CCB		
CCB	Y	Cd	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Co	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Cr	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Cu	0.001	1	98.39	3/21/2014	20:43	CCB		
CCB	Y	Fe	0.001	1	95.46	3/21/2014	20:42	CCB		
CCB	Y	K	0.065	1	95.46	3/21/2014	20:42	CCB		
CCB	Y	Li	-0.005	1	98.39	3/21/2014	20:42	CCB		
CCB	Y	Mg	-0.013	1	95.46	3/21/2014	20:42	CCB		
CCB	Y	Mn	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Mo	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Na	0.028	1	95.46	3/21/2014	20:42	CCB		
CCB	Y	Ni	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	P	-0.007	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Pb	-0.001	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Sb	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Se	0.003	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Sn	-0.002	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Sr	0.000	1	95.46	3/21/2014	20:42	CCB		
CCB	Y	Ti	0.000	1	98.39	3/21/2014	20:43	CCB		
CCB	Y	Tl	-0.001	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	V	0.001	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Zn	-0.003	1	98.39	3/21/2014	20:44	CCB		
J1402025-004	Y	Ag	0.001	1	99.45	3/21/2014	20:48	SAMP	6010 W	
J1402025-004	Y	Al	0.039	1	98.56	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	As	0.005	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	B	0.134	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Ba	0.009	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Be	0.000	1	99.45	3/21/2014	20:48	SAMP	6010 W	
J1402025-004	Y	Ca	23.590	1	98.56	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	Cd	0.000	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Co	0.000	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Cr	0.000	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Cu	0.002	1	99.45	3/21/2014	20:48	SAMP	6010 W	
J1402025-004	Y	Fe	0.287	1	98.56	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	K	25.350	1	98.56	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	Li	-0.005	1	99.45	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	Mg	7.927	1	98.56	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	Mn	0.059	1	99.45	3/21/2014	20:48	SAMP	6010 W	
J1402025-004	Y	Mo	0.001	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Na	17.140	1	98.56	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	Ni	0.000	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	P	0.015	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Pb	-0.003	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Sb	-0.001	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Se	0.004	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Sn	0.008	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Sr	0.194	1	98.56	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	Ti	0.000	1	99.45	3/21/2014	20:48	SAMP	6010 W	
J1402025-004	Y	Tl	0.000	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	V	0.004	1	99.45	3/21/2014	20:48	SAMP	6010 W	
J1402025-004	Y	Zn	0.001	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-005	Y	Ag	0.000	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Al	0.304	1	99.55	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	As	0.002	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	B	0.026	1	100	3/21/2014	20:53	SAMP	6010 W	

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-005	Y	Ba	0.009	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Be	0.000	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Ca	31.600	1	99.55	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	Cd	0.000	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Co	0.001	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Cr	0.000	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Cu	0.001	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Fe	0.999	1	99.55	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	K	0.946	1	99.55	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	Li	-0.003	1	100	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	Mg	15.330	1	99.55	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	Mn	0.027	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Mo	0.003	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Na	6.639	1	99.55	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	Ni	0.000	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	P	0.103	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Pb	-0.004	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Sb	0.000	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Se	0.001	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Sn	0.008	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Sr	0.052	1	99.55	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	Ti	0.003	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Tl	0.001	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	V	0.004	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Zn	0.001	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-006	Y	Ag	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Al	0.478	1	99.14	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	As	0.002	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	B	0.014	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Ba	0.052	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Be	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Ca	14.940	1	99.14	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	Cd	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Co	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Cr	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Cu	0.002	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Fe	0.018	1	99.14	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	K	3.932	1	99.14	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	Li	0.002	1	99.66	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	Mg	2.883	1	99.14	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	Mn	0.001	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Mo	0.008	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Na	10.950	1	99.14	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	Ni	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	P	0.004	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Pb	-0.004	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Sb	0.001	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Se	0.003	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Sn	0.005	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Sr	0.322	1	99.14	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	Ti	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Tl	0.001	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	V	0.002	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Zn	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-007	Y	Ag	0.001	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Al	0.165	1	99.74	3/21/2014	21:02	SAMP	6010 W	
J1402025-007	Y	As	0.003	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	B	0.021	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Ba	0.026	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Be	0.000	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Ca	43.790	1	99.74	3/21/2014	21:02	SAMP	6010 W	
J1402025-007	Y	Cd	0.015	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Co	0.001	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Cr	0.095	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Cu	0.005	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Fe	0.927	1	99.74	3/21/2014	21:02	SAMP	6010 W	
J1402025-007	Y	K	5.433	1	99.74	3/21/2014	21:02	SAMP	6010 W	
J1402025-007	Y	Li	0.006	1	99.41	3/21/2014	21:02	SAMP	6010 W	
J1402025-007	Y	Mg	2.137	1	99.74	3/21/2014	21:02	SAMP	6010 W	
J1402025-007	Y	Mn	0.020	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Mo	0.005	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Na	2.809	1	99.74	3/21/2014	21:02	SAMP	6010 W	
J1402025-007	Y	Ni	0.088	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	P	0.176	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Pb	-0.005	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Sb	0.001	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Se	0.002	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Sn	0.012	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Sr	0.268	1	99.74	3/21/2014	21:02	SAMP	6010 W	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-007	Y	Ti	0.010	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Tl	-0.001	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	V	0.002	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Zn	0.013	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007S	Y	Ag	0.515	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Al	5.381	1	99.19	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	As	0.519	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	B	2.537	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Ba	0.532	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Be	0.205	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Ca	49.560	1	99.19	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Cd	0.271	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Co	0.499	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Cr	0.601	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Cu	0.514	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Fe	6.095	1	99.19	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	K	108.700	1	99.19	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Li	5.129	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Mg	7.249	1	99.19	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Mn	0.524	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Mo	0.517	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Na	28.690	1	99.19	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Ni	0.600	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	P	5.368	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Pb	0.501	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Sb	0.518	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Se	0.520	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Sn	2.051	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Sr	0.785	1	99.19	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Ti	2.548	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Tl	0.509	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	V	1.013	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Zn	1.028	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007SD	Y	Ag	0.515	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Al	5.269	1	100.2	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	As	0.530	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	B	2.572	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Ba	0.531	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Be	0.205	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Ca	49.150	1	100.2	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Cd	0.273	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Co	0.505	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Cr	0.613	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Cu	0.513	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Fe	6.087	1	100.2	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	K	108.700	1	100.2	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Li	5.140	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Mg	7.179	1	100.2	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Mn	0.523	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Mo	0.525	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Na	28.750	1	100.2	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Ni	0.606	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	P	5.441	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Pb	0.507	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Sb	0.526	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Se	0.525	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Sn	2.078	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Sr	0.784	1	100.2	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Ti	2.544	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Tl	0.513	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	V	1.011	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Zn	1.026	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007L	Y	Ag	0.000	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Al	0.020	5	98.47	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	As	0.001	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	B	0.011	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Ba	0.005	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Be	0.000	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Ca	9.138	5	98.47	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	Cd	0.003	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Co	0.000	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Cr	0.023	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Cu	0.002	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Fe	0.229	5	98.47	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	K	1.180	5	98.47	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	Li	-0.002	5	99.3	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	Mg	0.436	5	98.47	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	Mn	0.004	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Mo	0.002	5	99.3	3/21/2014	21:14	SD	6010 W	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-007L	Y	Na	0.592	5	98.47	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	Ni	0.018	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	P	0.034	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Pb	-0.002	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Sb	0.001	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Se	0.002	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Sn	0.003	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Sr	0.056	5	98.47	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	Ti	0.002	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Tl	0.000	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	V	0.001	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Zn	0.002	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007A	Y	Ag	0.510	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Al	5.242	1	101.2	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	As	0.517	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	B	2.543	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Ba	0.528	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Be	0.205	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Ca	47.600	1	101.2	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Cd	0.269	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Co	0.499	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Cr	0.598	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Cu	0.514	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Fe	5.944	1	101.2	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	K	109.400	1	101.2	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Li	5.208	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Mg	7.021	1	101.2	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Mn	0.522	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Mo	0.513	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Na	28.800	1	101.2	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Ni	0.593	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	P	5.324	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Pb	0.498	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Sb	0.515	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Se	0.506	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Sn	2.032	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Sr	0.784	1	101.2	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Ti	2.543	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Tl	0.507	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	V	1.011	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Zn	1.021	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402037-001	Y	Ag	0.000	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Al	0.298	1	99.9	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	As	0.001	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	B	0.028	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Ba	0.006	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Be	0.000	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Ca	7.859	1	99.9	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	Cd	0.000	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Co	0.001	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Cr	0.001	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Cu	0.002	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Fe	0.026	1	99.9	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	K	6.617	1	99.9	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	Li	-0.004	1	99.5	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	Mg	2.596	1	99.9	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	Mn	0.090	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Mo	0.000	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Na	2.016	1	99.9	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	Ni	0.002	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	P	0.010	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Pb	-0.002	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Sb	0.000	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Se	0.003	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Sn	0.002	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Sr	0.010	1	99.9	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	Ti	0.002	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Tl	0.001	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	V	0.001	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Zn	0.058	1	99.5	3/21/2014	21:22	SAMP	6010 W	
MB-02132-02	Y	Ag	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Al	0.035	1	100.1	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	As	-0.001	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	B	0.008	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Ba	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Be	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Ca	0.000	1	100.1	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	Cd	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Co	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
MB-02132-02	Y	Cr	0.002	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Cu	0.001	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Fe	0.017	1	100.1	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	K	-0.005	1	100.1	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	Li	-0.005	1	99.54	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	Mg	0.005	1	100.1	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	Mn	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Mo	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Na	0.002	1	100.1	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	Ni	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	P	0.003	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Pb	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Sb	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Se	0.003	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Sn	-0.002	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Sr	0.000	1	100.1	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	Ti	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Tl	0.001	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	V	0.001	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Zn	0.001	1	99.54	3/21/2014	21:27	MBLK	6010 W	
CCV	Y	Ag	0.495	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Al	5.014	1	98.06	3/21/2014	21:30	CCV		
CCV	Y	As	0.493	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	B	2.415	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Ba	0.496	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Be	0.198	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Ca	5.027	1	98.06	3/21/2014	21:30	CCV		
CCV	Y	Cd	0.247	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Co	0.490	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Cr	0.494	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Cu	0.494	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Fe	5.064	1	98.06	3/21/2014	21:30	CCV		
CCV	Y	K	100.400	1	98.06	3/21/2014	21:30	CCV		
CCV	Y	Li	5.021	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Mg	5.018	1	98.06	3/21/2014	21:30	CCV		
CCV	Y	Mn	0.496	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Mo	0.501	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Na	25.320	1	98.06	3/21/2014	21:30	CCV		
CCV	Y	Ni	0.502	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	P	4.939	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Pb	0.493	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Sb	0.500	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Se	0.493	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Sn	2.007	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Sr	0.505	1	98.06	3/21/2014	21:30	CCV		
CCV	Y	Ti	2.485	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Tl	0.487	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	V	0.991	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Zn	0.994	1	96.34	3/21/2014	21:30	CCV		
CCB	Y	Ag	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Al	-0.028	1	96.56	3/21/2014	21:34	CCB		
CCB	Y	As	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	B	0.008	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Ba	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Be	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Ca	-0.003	1	96.56	3/21/2014	21:34	CCB		
CCB	Y	Cd	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Co	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Cr	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Cu	0.001	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Fe	0.001	1	96.56	3/21/2014	21:34	CCB		
CCB	Y	K	0.037	1	96.56	3/21/2014	21:34	CCB		
CCB	Y	Li	-0.005	1	99.1	3/21/2014	21:34	CCB		
CCB	Y	Mg	-0.012	1	96.56	3/21/2014	21:34	CCB		
CCB	Y	Mn	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Mo	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Na	0.018	1	96.56	3/21/2014	21:34	CCB		
CCB	Y	Ni	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	P	-0.002	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Pb	-0.001	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Sb	0.001	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Se	0.004	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Sn	-0.002	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Sr	0.000	1	96.56	3/21/2014	21:34	CCB		
CCB	Y	Ti	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Tl	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	V	0.001	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Zn	-0.003	1	99.1	3/21/2014	21:35	CCB		
LCS-02132-01	Y	Ag	0.507	1	97.37	3/21/2014	21:38	LCS	6010 W	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
MB-02087-01	Y	Sb	0.000	1	97.32	3/21/2014	23:53	MBLK	6010 TCLP	
MB-02087-01	Y	Se	0.003	1	97.32	3/21/2014	23:53	MBLK	6010 TCLP	
MB-02087-01	Y	Sn	-0.001	1	97.32	3/21/2014	23:53	MBLK	6010 TCLP	
MB-02087-01	Y	Sr	0.000	1	98.45	3/21/2014	23:51	MBLK	6010 TCLP	
MB-02087-01	Y	Ti	0.000	1	97.32	3/21/2014	23:53	MBLK	6010 TCLP	
MB-02087-01	Y	Tl	0.003	1	97.32	3/21/2014	23:53	MBLK	6010 TCLP	
MB-02087-01	Y	V	0.002	1	97.32	3/21/2014	23:53	MBLK	6010 TCLP	
MB-02087-01	Y	Zn	0.000	1	97.32	3/21/2014	23:53	MBLK	6010 TCLP	
LCS-02087-02	Y	Ag	0.508	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Al	5.071	1	100.5	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	As	0.516	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	B	2.510	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Ba	0.499	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Be	0.201	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Ca	4.983	1	100.5	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Cd	0.255	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Co	0.496	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Cr	0.502	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Cu	0.503	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Fe	5.059	1	100.5	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	K	101.900	1	100.5	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Li	5.075	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Mg	4.947	1	100.5	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Mn	0.498	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Mo	0.507	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Na	164.900	1	100.5	3/21/2014	23:56	LCS	6010 TCLP	LCS FH 200.7 , LCS FH 6010 W , LCS FH 6010 S ,
LCS-02087-02	Y	Ni	0.507	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	P	5.128	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Pb	0.504	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Sb	0.521	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Se	0.520	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Sn	2.024	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Sr	0.512	1	100.5	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Ti	2.507	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Tl	0.500	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	V	1.001	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Zn	1.003	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
CCV	Y	Ag	0.495	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Al	4.932	1	97.86	3/21/2014	23:59	CCV		
CCV	Y	As	0.504	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	B	2.447	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Ba	0.495	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Be	0.198	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Ca	4.937	1	97.86	3/21/2014	23:59	CCV		
CCV	Y	Cd	0.249	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Co	0.493	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Cr	0.496	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Cu	0.495	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Fe	4.954	1	97.86	3/21/2014	23:59	CCV		
CCV	Y	K	100.600	1	97.86	3/21/2014	23:59	CCV		
CCV	Y	Li	5.053	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Mg	4.903	1	97.86	3/21/2014	23:59	CCV		
CCV	Y	Mn	0.495	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Mo	0.505	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Na	25.380	1	97.86	3/21/2014	23:59	CCV		
CCV	Y	Ni	0.504	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	P	4.974	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Pb	0.495	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Sb	0.504	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Se	0.490	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Sn	2.017	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Sr	0.507	1	97.86	3/21/2014	23:59	CCV		
CCV	Y	Ti	2.484	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Tl	0.497	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	V	0.992	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Zn	0.986	1	95.31	3/21/2014	23:59	CCV		
CCB	Y	Ag	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Al	-0.012	1	96.87	3/22/2014	00:03	CCB		
CCB	Y	As	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	B	0.014	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Ba	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Be	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Ca	-0.003	1	96.87	3/22/2014	00:03	CCB		
CCB	Y	Cd	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Co	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Cr	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Cu	0.001	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Fe	-0.004	1	96.87	3/22/2014	00:03	CCB		
CCB	Y	K	0.081	1	96.87	3/22/2014	00:02	CCB		

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
CCB	Y	Li	-0.005	1	98.22	3/22/2014	00:02	CCB		
CCB	Y	Mg	-0.009	1	96.87	3/22/2014	00:03	CCB		
CCB	Y	Mn	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Mo	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Na	0.030	1	96.87	3/22/2014	00:02	CCB		
CCB	Y	Ni	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	P	0.003	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Pb	-0.001	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Sb	0.001	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Se	0.003	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Sn	-0.002	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Sr	0.000	1	96.87	3/22/2014	00:02	CCB		
CCB	Y	Ti	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Tl	0.001	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	V	0.001	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Zn	-0.003	1	98.22	3/22/2014	00:04	CCB		
J1401898-001	Y	Ag	0.000	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Al	0.089	1	99.43	3/22/2014	00:08	SAMP	6010 TCLP	
J1401898-001	Y	As	0.001	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	B	0.025	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Ba	0.008	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Be	0.000	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Ca	5.085	1	99.43	3/22/2014	00:07	SAMP	6010 TCLP	
J1401898-001	Y	Cd	0.004	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Co	0.002	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Cr	0.002	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Cu	0.010	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Fe	1.100	1	99.43	3/22/2014	00:08	SAMP	6010 TCLP	
J1401898-001	Y	K	1.276	1	99.43	3/22/2014	00:07	SAMP	6010 TCLP	
J1401898-001	Y	Li	-0.004	1	97.51	3/22/2014	00:07	SAMP	6010 TCLP	
J1401898-001	Y	Mg	1.795	1	99.43	3/22/2014	00:08	SAMP	6010 TCLP	
J1401898-001	Y	Mn	0.026	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Mo	0.001	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	N	Na	143.100	1	99.43	3/22/2014	00:07	SAMP	6010 TCLP	MB FH, LCS FH,
J1401898-001	Y	Ni	0.006	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	P	0.479	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Pb	0.000	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Sb	0.005	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Se	0.005	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Sn	0.003	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Sr	0.009	1	99.43	3/22/2014	00:07	SAMP	6010 TCLP	
J1401898-001	Y	Ti	0.000	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Tl	0.001	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	V	0.002	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Zn	0.373	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
T1400360-001	Y	Ag	0.000	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Al	0.208	1	99.79	3/22/2014	00:13	SAMP	6010 TCLP	
T1400360-001	Y	As	0.001	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	B	0.013	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Ba	0.010	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Be	0.000	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Ca	17.390	1	99.79	3/22/2014	00:13	SAMP	6010 TCLP	
T1400360-001	Y	Cd	0.000	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Co	0.008	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Cr	0.000	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Cu	0.010	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Fe	0.021	1	99.79	3/22/2014	00:13	SAMP	6010 TCLP	
T1400360-001	Y	K	0.379	1	99.79	3/22/2014	00:13	SAMP	6010 TCLP	
T1400360-001	Y	Li	0.001	1	96.51	3/22/2014	00:13	SAMP	6010 TCLP	
T1400360-001	Y	Mg	1.034	1	99.79	3/22/2014	00:13	SAMP	6010 TCLP	
T1400360-001	Y	Mn	0.149	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Mo	0.001	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	N	Na	136.400	1	99.79	3/22/2014	00:12	SAMP	6010 TCLP	MB FH, LCS FH,
T1400360-001	Y	Ni	0.013	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	P	-0.001	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Pb	-0.003	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Sb	0.000	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Se	0.004	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Sn	0.007	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Sr	0.067	1	99.79	3/22/2014	00:13	SAMP	6010 TCLP	
T1400360-001	Y	Ti	0.000	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Tl	0.001	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	V	0.002	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Zn	0.016	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
MB-02130-02	Y	Ag	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Al	0.080	1	101.9	3/22/2014	00:18	MBLK	6010 D	
MB-02130-02	Y	As	0.001	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	B	0.009	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Ba	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
MB-02130-02	Y	Be	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Ca	0.015	1	101.9	3/22/2014	00:18	MBLK	6010 D	
MB-02130-02	Y	Cd	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Co	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Cr	0.001	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Cu	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Fe	0.016	1	101.9	3/22/2014	00:18	MBLK	6010 D	
MB-02130-02	Y	K	0.052	1	101.9	3/22/2014	00:17	MBLK	6010 D	
MB-02130-02	Y	Li	-0.005	1	101.9	3/22/2014	00:17	MBLK	6010 D	
MB-02130-02	Y	Mg	0.004	1	101.9	3/22/2014	00:18	MBLK	6010 D	
MB-02130-02	Y	Mn	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Mo	-0.001	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Na	0.019	1	101.9	3/22/2014	00:17	MBLK	6010 D	
MB-02130-02	Y	Ni	-0.001	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	P	0.012	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Pb	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Sb	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Se	0.006	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Sn	-0.001	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Sr	0.000	1	101.9	3/22/2014	00:17	MBLK	6010 D	
MB-02130-02	Y	Ti	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Tl	0.001	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	V	0.001	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Zn	0.002	1	101.9	3/22/2014	00:19	MBLK	6010 D	
LCS-02130-01	Y	Ag	0.501	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Al	5.208	1	101.2	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	As	0.509	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	B	2.489	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Ba	0.494	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Be	0.199	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Ca	5.045	1	101.2	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Cd	0.253	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Co	0.498	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Cr	0.501	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Cu	0.498	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Fe	5.048	1	101.2	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	K	101.500	1	101.2	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Li	5.129	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Mg	5.008	1	101.2	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Mn	0.494	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Mo	0.506	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Na	25.590	1	101.2	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Ni	0.509	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	P	5.067	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Pb	0.501	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Sb	0.508	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Se	0.511	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Sn	2.024	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Sr	0.517	1	101.2	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Ti	2.484	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Tl	0.505	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	V	0.988	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Zn	0.986	1	97.51	3/22/2014	00:22	LCS	6010 D	
J1402025-001	Y	Ag	0.001	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Al	0.112	1	101.5	3/22/2014	00:26	SAMP	6010 D	
J1402025-001	Y	As	0.002	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	B	0.028	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Ba	0.013	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Be	0.000	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Ca	49.960	1	101.5	3/22/2014	00:25	SAMP	6010 D	
J1402025-001	Y	Cd	0.000	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Co	0.000	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Cr	0.000	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Cu	0.001	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Fe	0.000	1	101.5	3/22/2014	00:26	SAMP	6010 D	
J1402025-001	Y	K	1.395	1	101.5	3/22/2014	00:25	SAMP	6010 D	
J1402025-001	Y	Li	-0.005	1	99.87	3/22/2014	00:25	SAMP	6010 D	
J1402025-001	Y	Mg	1.511	1	101.5	3/22/2014	00:26	SAMP	6010 D	
J1402025-001	Y	Mn	0.000	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Mo	0.004	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Na	1.593	1	101.5	3/22/2014	00:25	SAMP	6010 D	
J1402025-001	Y	Ni	0.000	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	P	0.012	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Pb	-0.005	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Sb	0.002	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Se	0.004	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Sn	0.012	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Sr	0.140	1	101.5	3/22/2014	00:25	SAMP	6010 D	
J1402025-001	Y	Ti	0.000	1	99.87	3/22/2014	00:27	SAMP	6010 D	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-001	Y	Tl	0.001	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	V	0.004	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Zn	0.002	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-002	Y	Ag	0.000	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Al	0.110	1	101.5	3/22/2014	00:31	SAMP	6010 D	
J1402025-002	Y	As	0.002	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	B	0.030	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Ba	0.009	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Be	0.000	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Ca	30.860	1	101.5	3/22/2014	00:30	SAMP	6010 D	
J1402025-002	Y	Cd	0.000	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Co	0.000	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Cr	-0.001	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Cu	0.001	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Fe	0.753	1	101.5	3/22/2014	00:31	SAMP	6010 D	
J1402025-002	Y	K	0.943	1	101.5	3/22/2014	00:30	SAMP	6010 D	
J1402025-002	Y	Li	-0.004	1	100.3	3/22/2014	00:30	SAMP	6010 D	
J1402025-002	Y	Mg	14.720	1	101.5	3/22/2014	00:31	SAMP	6010 D	
J1402025-002	Y	Mn	0.026	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Mo	0.003	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Na	6.772	1	101.5	3/22/2014	00:30	SAMP	6010 D	
J1402025-002	Y	Ni	0.000	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	P	0.051	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Pb	-0.004	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Sb	-0.001	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Se	0.000	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Sn	0.009	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Sr	0.052	1	101.5	3/22/2014	00:30	SAMP	6010 D	
J1402025-002	Y	Ti	0.000	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Tl	0.002	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	V	0.003	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Zn	0.002	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002S	Y	Ag	0.510	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Al	5.226	1	101.5	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	As	0.514	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	B	2.534	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Ba	0.507	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Be	0.202	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Ca	35.360	1	101.5	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Cd	0.255	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Co	0.497	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Cr	0.502	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Cu	0.504	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Fe	5.802	1	101.5	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	K	103.200	1	101.5	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Li	5.131	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Mg	19.720	1	101.5	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Mn	0.523	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Mo	0.512	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Na	32.150	1	101.5	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Ni	0.506	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	P	5.129	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Pb	0.498	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Sb	0.512	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Se	0.513	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Sn	2.029	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Sr	0.569	1	101.5	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Ti	2.514	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Tl	0.504	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	V	1.004	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Zn	0.987	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002SD	Y	Ag	0.513	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Al	5.103	1	101.5	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	As	0.518	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	B	2.568	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Ba	0.510	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Be	0.204	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Ca	35.270	1	101.5	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Cd	0.256	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Co	0.499	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Cr	0.506	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Cu	0.509	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Fe	5.716	1	101.5	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	K	103.200	1	101.5	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Li	5.152	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Mg	19.320	1	101.5	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Mn	0.527	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Mo	0.514	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Na	32.220	1	101.5	3/22/2014	00:38	MSD	6010 D	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-002SD	Y	Ni	0.508	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	P	5.198	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Pb	0.501	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Sb	0.519	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Se	0.514	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Sn	2.038	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Sr	0.567	1	101.5	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Ti	2.530	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Tl	0.498	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	V	1.013	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Zn	0.994	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002L	Y	Ag	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Al	0.027	5	98.86	3/22/2014	00:42	SD	6010 D	
J1402025-002L	Y	As	-0.001	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	B	0.017	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Ba	0.002	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Be	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Ca	6.320	5	98.86	3/22/2014	00:41	SD	6010 D	
J1402025-002L	Y	Cd	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Co	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Cr	0.001	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Cu	0.001	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Fe	0.165	5	98.86	3/22/2014	00:42	SD	6010 D	
J1402025-002L	Y	K	0.280	5	98.86	3/22/2014	00:41	SD	6010 D	
J1402025-002L	Y	Li	-0.004	5	99.05	3/22/2014	00:41	SD	6010 D	
J1402025-002L	Y	Mg	3.067	5	98.86	3/22/2014	00:42	SD	6010 D	
J1402025-002L	Y	Mn	0.005	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Mo	0.001	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Na	1.385	5	98.86	3/22/2014	00:41	SD	6010 D	
J1402025-002L	Y	Ni	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	P	0.012	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Pb	-0.002	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Sb	0.001	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Se	0.003	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Sn	0.002	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Sr	0.011	5	98.86	3/22/2014	00:41	SD	6010 D	
J1402025-002L	Y	Ti	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Tl	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	V	0.001	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Zn	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002A	Y	Ag	0.510	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Al	5.267	1	101.8	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	As	0.510	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	B	2.576	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Ba	0.513	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Be	0.205	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Ca	35.020	1	101.8	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Cd	0.258	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Co	0.500	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Cr	0.506	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Cu	0.511	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Fe	5.800	1	101.8	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	K	104.400	1	101.8	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Li	5.195	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Mg	19.520	1	101.8	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Mn	0.530	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Mo	0.516	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Na	32.390	1	101.8	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Ni	0.511	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	P	5.225	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Pb	0.504	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Sb	0.520	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Se	0.512	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Sn	2.031	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Sr	0.570	1	101.8	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Ti	2.541	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Tl	0.507	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	V	1.017	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Zn	1.008	1	96.73	3/22/2014	00:46	PS	6010 D	
CCV	Y	Ag	0.494	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Al	4.961	1	98.53	3/22/2014	00:49	CCV		
CCV	Y	As	0.500	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	B	2.440	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Ba	0.495	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Be	0.198	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Ca	4.968	1	98.53	3/22/2014	00:49	CCV		
CCV	Y	Cd	0.249	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Co	0.494	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Cr	0.497	1	95.26	3/22/2014	00:49	CCV		

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
CCV	Y	Cu	0.494	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Fe	4.989	1	98.53	3/22/2014	00:49	CCV		
CCV	Y	K	100.800	1	98.53	3/22/2014	00:49	CCV		
CCV	Y	Li	5.079	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Mg	4.943	1	98.53	3/22/2014	00:49	CCV		
CCV	Y	Mn	0.495	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Mo	0.504	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Na	25.380	1	98.53	3/22/2014	00:49	CCV		
CCV	Y	Ni	0.504	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	P	4.965	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Pb	0.495	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Sb	0.502	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Se	0.494	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Sn	2.014	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Sr	0.510	1	98.53	3/22/2014	00:49	CCV		
CCV	Y	Ti	2.481	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Tl	0.496	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	V	0.993	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Zn	0.988	1	95.26	3/22/2014	00:49	CCV		
CCB	Y	Ag	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Al	0.004	1	97.99	3/22/2014	00:53	CCB		
CCB	Y	As	-0.001	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	B	0.014	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Ba	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Be	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Ca	-0.004	1	97.99	3/22/2014	00:53	CCB		
CCB	Y	Cd	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Co	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Cr	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Cu	0.001	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Fe	0.001	1	97.99	3/22/2014	00:53	CCB		
CCB	Y	K	0.080	1	97.99	3/22/2014	00:53	CCB		
CCB	Y	Li	-0.005	1	97.94	3/22/2014	00:53	CCB		
CCB	Y	Mg	-0.008	1	97.99	3/22/2014	00:53	CCB		
CCB	Y	Mn	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Mo	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Na	0.023	1	97.99	3/22/2014	00:53	CCB		
CCB	Y	Ni	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	P	0.003	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Pb	-0.001	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Sb	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Se	0.002	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Sn	-0.001	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Sr	0.000	1	97.99	3/22/2014	00:53	CCB		
CCB	Y	Ti	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Tl	-0.001	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	V	0.001	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Zn	-0.003	1	97.94	3/22/2014	00:54	CCB		
J1402025-003	Y	Ag	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Al	0.096	1	101	3/22/2014	00:58	SAMP	6010 D	
J1402025-003	Y	As	0.004	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	B	0.028	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Ba	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Be	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Ca	23.240	1	101	3/22/2014	00:57	SAMP	6010 D	
J1402025-003	Y	Cd	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Co	0.001	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Cr	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Cu	0.001	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Fe	0.745	1	101	3/22/2014	00:58	SAMP	6010 D	
J1402025-003	Y	K	1.020	1	101	3/22/2014	00:57	SAMP	6010 D	
J1402025-003	Y	Li	-0.004	1	100	3/22/2014	00:57	SAMP	6010 D	
J1402025-003	Y	Mg	9.959	1	101	3/22/2014	00:58	SAMP	6010 D	
J1402025-003	Y	Mn	0.026	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Mo	0.006	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Na	5.487	1	101	3/22/2014	00:57	SAMP	6010 D	
J1402025-003	Y	Ni	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	P	0.195	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Pb	-0.004	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Sb	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Se	0.001	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Sn	0.007	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Sr	0.034	1	101	3/22/2014	00:57	SAMP	6010 D	
J1402025-003	Y	Ti	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Tl	0.001	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	V	0.003	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Zn	0.002	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-004	Y	Ag	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Al	0.095	1	100.4	3/22/2014	01:03	SAMP	6010 D	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-004	Y	As	0.005	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	B	0.141	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Ba	0.009	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Be	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Ca	23.740	1	100.4	3/22/2014	01:02	SAMP	6010 D	
J1402025-004	Y	Cd	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Co	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Cr	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Cu	0.001	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Fe	0.245	1	100.4	3/22/2014	01:03	SAMP	6010 D	
J1402025-004	Y	K	25.610	1	100.4	3/22/2014	01:02	SAMP	6010 D	
J1402025-004	Y	Li	-0.004	1	99.07	3/22/2014	01:02	SAMP	6010 D	
J1402025-004	Y	Mg	7.860	1	100.4	3/22/2014	01:03	SAMP	6010 D	
J1402025-004	Y	Mn	0.060	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Mo	0.001	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Na	17.460	1	100.4	3/22/2014	01:02	SAMP	6010 D	
J1402025-004	Y	Ni	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	P	0.016	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Pb	-0.004	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Sb	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Se	0.003	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Sn	0.008	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Sr	0.199	1	100.4	3/22/2014	01:02	SAMP	6010 D	
J1402025-004	Y	Ti	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Tl	0.001	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	V	0.003	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Zn	0.002	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-005	Y	Ag	0.000	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Al	0.099	1	100.6	3/22/2014	01:08	SAMP	6010 D	
J1402025-005	Y	As	0.003	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	B	0.031	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Ba	0.009	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Be	0.000	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Ca	30.740	1	100.6	3/22/2014	01:07	SAMP	6010 D	
J1402025-005	Y	Cd	0.000	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Co	0.000	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Cr	0.005	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Cu	0.001	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Fe	0.887	1	100.6	3/22/2014	01:08	SAMP	6010 D	
J1402025-005	Y	K	0.980	1	100.6	3/22/2014	01:07	SAMP	6010 D	
J1402025-005	Y	Li	-0.004	1	100.1	3/22/2014	01:07	SAMP	6010 D	
J1402025-005	Y	Mg	14.790	1	100.6	3/22/2014	01:08	SAMP	6010 D	
J1402025-005	Y	Mn	0.026	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Mo	0.003	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Na	6.717	1	100.6	3/22/2014	01:07	SAMP	6010 D	
J1402025-005	Y	Ni	0.000	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	P	0.050	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Pb	-0.003	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Sb	0.000	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Se	0.001	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Sn	0.008	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Sr	0.051	1	100.6	3/22/2014	01:07	SAMP	6010 D	
J1402025-005	Y	Ti	0.000	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Tl	0.002	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	V	0.003	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Zn	0.002	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-006	Y	Ag	0.000	1	99.97	3/22/2014	01:13	SAMP	6010 D	
J1402025-006	Y	Al	0.471	1	100.6	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	As	0.002	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	B	0.020	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Ba	0.051	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Be	0.000	1	99.97	3/22/2014	01:13	SAMP	6010 D	
J1402025-006	Y	Ca	14.370	1	100.6	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	Cd	0.000	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Co	0.000	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Cr	0.000	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Cu	0.001	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Fe	0.005	1	100.6	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	K	3.925	1	100.6	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	Li	0.002	1	99.97	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	Mg	2.699	1	100.6	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	Mn	0.000	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Mo	0.008	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Na	11.050	1	100.6	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	Ni	0.000	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	P	0.013	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Pb	-0.003	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Sb	0.000	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Se	0.004	1	99.97	3/22/2014	01:14	SAMP	6010 D	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-006	Y	Sn	0.005	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Sr	0.317	1	100.6	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	Ti	0.000	1	99.97	3/22/2014	01:13	SAMP	6010 D	
J1402025-006	Y	Tl	0.001	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	V	0.002	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Zn	0.002	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-007	Y	Ag	0.000	1	99.97	3/22/2014	01:18	SAMP	6010 D	
J1402025-007	Y	Al	0.121	1	100.8	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	As	0.002	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	B	0.024	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Ba	0.024	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Be	0.000	1	99.97	3/22/2014	01:18	SAMP	6010 D	
J1402025-007	Y	Ca	43.060	1	100.8	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	Cd	0.001	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Co	0.000	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Cr	0.002	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Cu	0.001	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Fe	0.341	1	100.8	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	K	5.289	1	100.8	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	Li	0.005	1	99.97	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	Mg	1.973	1	100.8	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	Mn	0.011	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Mo	0.003	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Na	2.742	1	100.8	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	Ni	0.032	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	P	0.156	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Pb	-0.005	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Sb	0.001	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Se	0.002	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Sn	0.012	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Sr	0.265	1	100.8	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	Ti	0.000	1	99.97	3/22/2014	01:18	SAMP	6010 D	
J1402025-007	Y	Tl	0.000	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	V	0.002	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Zn	0.002	1	99.97	3/22/2014	01:19	SAMP	6010 D	
ICSA	Y	Ag	-0.006	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Al	756.800	1	91.61	3/22/2014	01:21	ICS-A		
ICSA	Y	As	0.011	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	B	0.048	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Ba	-0.001	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Be	0.002	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Ca	699.600	1	91.61	3/22/2014	01:21	ICS-A		
ICSA	Y	Cd	0.008	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Co	0.016	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Cr	-0.003	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Cu	0.002	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Fe	667.400	1	91.61	3/22/2014	01:21	ICS-A		
ICSA	Y	K	0.182	1	91.61	3/22/2014	01:21	ICS-A		
ICSA	Y	Li	-0.005	1	85.27	3/22/2014	01:21	ICS-A		
ICSA	Y	Mg	693.800	1	91.61	3/22/2014	01:21	ICS-A		
ICSA	Y	Mn	-0.012	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Mo	0.013	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Na	0.028	1	91.61	3/22/2014	01:21	ICS-A		
ICSA	Y	Ni	0.015	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	P	-0.002	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Pb	-0.013	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Sb	-0.010	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Se	0.004	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Sn	0.036	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Sr	-0.002	1	91.61	3/22/2014	01:21	ICS-A		
ICSA	Y	Ti	0.003	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Tl	0.005	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	V	-0.008	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Zn	0.026	1	85.27	3/22/2014	01:22	ICS-A		
ICSAB	Y	Ag	0.207	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Al	769.900	1	92.53	3/22/2014	01:29	ICS-AB		
ICSAB	Y	As	0.210	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	B	1.006	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Ba	0.187	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Be	0.082	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Ca	692.800	1	92.53	3/22/2014	01:29	ICS-AB		
ICSAB	Y	Cd	0.112	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Co	0.199	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Cr	0.189	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Cu	0.211	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Fe	677.800	1	92.53	3/22/2014	01:29	ICS-AB		
ICSAB	Y	K	46.480	1	92.53	3/22/2014	01:29	ICS-AB		
ICSAB	Y	Li	2.298	1	85.26	3/22/2014	01:29	ICS-AB		
ICSAB	Y	Mg	700.500	1	92.53	3/22/2014	01:29	ICS-AB		

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
ICSAB	Y	Mn	0.185	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Mo	0.208	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Na	11.370	1	92.53	3/22/2014	01:29	ICS-AB		
ICSAB	Y	Ni	0.199	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	P	2.024	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Pb	0.162	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Sb	0.200	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Se	0.202	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Sn	0.785	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Sr	0.209	1	92.53	3/22/2014	01:29	ICS-AB		
ICSAB	Y	Ti	1.027	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Tl	0.187	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	V	0.395	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Zn	0.379	1	85.26	3/22/2014	01:30	ICS-AB		
CCV	Y	Ag	0.500	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Al	4.984	1	97.93	3/22/2014	01:37	CCV		
CCV	Y	As	0.501	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	B	2.452	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Ba	0.500	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Be	0.200	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Ca	4.952	1	97.93	3/22/2014	01:37	CCV		
CCV	Y	Cd	0.251	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Co	0.498	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Cr	0.501	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Cu	0.499	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Fe	4.990	1	97.93	3/22/2014	01:37	CCV		
CCV	Y	K	101.000	1	97.93	3/22/2014	01:37	CCV		
CCV	Y	Li	5.107	1	94.76	3/22/2014	01:37	CCV		
CCV	Y	Mg	4.969	1	97.93	3/22/2014	01:37	CCV		
CCV	Y	Mn	0.501	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Mo	0.508	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Na	25.590	1	97.93	3/22/2014	01:37	CCV		
CCV	Y	Ni	0.508	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	P	5.022	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Pb	0.503	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Sb	0.505	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Se	0.500	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Sn	2.037	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Sr	0.512	1	97.93	3/22/2014	01:37	CCV		
CCV	Y	Ti	2.507	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Tl	0.502	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	V	1.004	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Zn	1.002	1	94.76	3/22/2014	01:38	CCV		
CCB	Y	Ag	0.000	1	98.32	3/22/2014	01:42	CCB		
CCB	Y	Al	-0.018	1	97.16	3/22/2014	01:41	CCB		
CCB	Y	As	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	B	0.005	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Ba	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Be	0.000	1	98.32	3/22/2014	01:42	CCB		
CCB	Y	Ca	-0.005	1	97.16	3/22/2014	01:41	CCB		
CCB	Y	Cd	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Co	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Cr	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Cu	0.001	1	98.32	3/22/2014	01:42	CCB		
CCB	Y	Fe	0.001	1	97.16	3/22/2014	01:41	CCB		
CCB	Y	K	0.038	1	97.16	3/22/2014	01:41	CCB		
CCB	Y	Li	-0.005	1	98.32	3/22/2014	01:41	CCB		
CCB	Y	Mg	-0.001	1	97.16	3/22/2014	01:41	CCB		
CCB	Y	Mn	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Mo	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Na	0.020	1	97.16	3/22/2014	01:41	CCB		
CCB	Y	Ni	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	P	0.001	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Pb	-0.002	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Sb	0.001	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Se	0.003	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Sn	-0.001	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Sr	0.000	1	97.16	3/22/2014	01:41	CCB		
CCB	Y	Ti	0.000	1	98.32	3/22/2014	01:42	CCB		
CCB	Y	Tl	-0.001	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	V	0.001	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Zn	-0.003	1	98.32	3/22/2014	01:43	CCB		

Columbia Analytical Services

Analytical Run Coversheet

Analyst: VS/SRO   Data File ID: 032414A   LIMS Run #: 384956

Analysis: ICP-MS   Method References: 200.8 / 6020   Inst ID: J-ICP-MS-01

Standard's Trace Numbers

STD ID	Trace #	Exp Date	STD ID	Trace #	Exp Date
ICAL-1	MET-17-81C	4-1-14	INT STD	MET-17-83C	4-19-14
ICAL-2	81D		ICSA	83A	3-26-14
ICAL-3	81E		ICSAB	83B	3-26-14
ICAL-4	81F		Blank / Diluent	81C	3-5-15
ICV	81G				

Standard Concentrations and Ranges

Element	MRL	Linear Range	ICV	CCV	LCS	ICSA	ICSAB	Units	ICV RSD
9Be	0.5	3000	20	25	25	0	10	ug/L	3.766
27Al	50	50000	500	2500	2500	50000	51000	ug/L	1.264
47Ti	5	5000	250	250	250	1000	1100	ug/L	1.36
48Ti	5	5000	250	250	250	1000	1100	ug/L	0.531
51V	2	10000	100	100	100	0	40	ug/L	0.767
52Cr	1	5000	50	50	50	0	20	ug/L	0.158
55Mn	2	5000	50	100	100	0	40	ug/L	0.485
59Co	1	5000	50	50	50	0	20	ug/L	0.503
60Ni	2	5000	50	100	100	0	40	ug/L	0.617
62Ni	2	5000	50	100	100	0	40	ug/L	2.886
63Cu	1	5000	50	50	50	0	20	ug/L	0.932
65Cu	1	5000	50	50	50	0	20	ug/L	2.429
66Zn	5	10000	100	250	250	0	100	ug/L	0.786
68Zn	5	10000	100	250	250	0	100	ug/L	0.585
75As	1	5000	50	50	50	0	20	ug/L	0.864
78Se	2	5000	50	100	100	0	40	ug/L	2.221
82Se	2	5000	50	100	100	0	40	ug/L	0.776
86Sr	2	5000	50	100	100	0	40	ug/L	2.997
88Sr	2	5000	50	100	100	0	40	ug/L	0.608
97Mo	2	5000	50	100	100	1000	1040	ug/L	0.931
98Mo	2	5000	50	100	100	1000	1040	ug/L	1.332
107Ag	0.5	100	50	25	25	0	10	ug/L	0.734
109Ag	0.5	100	50	25	25	0	10	ug/L	0.377
111Cd	0.4	2500	25	20	20	0	8	ug/L	0.51
114Cd	0.4	2500	25	20	20	0	8	ug/L	1.198
118Sn	5	20000	200	250	250	0	100	ug/L	1.152
120Sn	5	20000	200	250	250	0	100	ug/L	0.396
121Sb	1	5000	50	50	50	0	20	ug/L	1.631
123Sb	1	5000	50	50	50	0	20	ug/L	1.142
135Ba	2	5000	50	100	100	0	40	ug/L	1.637
137Ba	2	5000	50	100	100	0	40	ug/L	1.16
203Tl	0.2	5000	50	10	10	0	4	ug/L	0.953
205Tl	0.2	5000	50	10	10	0	4	ug/L	0.51
208Pb	0.5	5000	50	25	25	0	10	ug/L	1.092

Stability Report < 5% ✓

Cal Curves > 0.995 ✓

Mass Call Rpt Incl. ✓

Comments

ANALYSIS BY VS, REPORTED BY SRO

Isotopes in **BOLD** are the default isotopes used for reporting.

Reviewed By / Date: VP 3/27/14

ICP-MS Run Sequence   Date File ID: 032414A

#	Samp / Std ID	Date	Time	#	Samp / Std ID	Date	Time	#	Samp / Std ID	Date	Time
1	Cal Blank	3/24/14	16:37								
2	Cal 1	3/24/14	16:43								
3	Cal 2	3/24/14	16:48								
4	Cal 3	3/24/14	16:53								
5	Cal 4	3/24/14	16:58								
6	ICV	3/24/14	17:03								
7	ICB	3/24/14	17:08								
8	MRL	3/24/14	17:13								
9	ICSA	3/24/14	17:18								
10	ICSAB	3/24/14	17:23								
11	CCV-1	3/24/14	17:28								
12	CCB-1	3/24/14	17:33								
13	MB-02134-04	3/24/14	17:38								
14	LCS-02134-03	3/24/14	17:43								
15	J1402003-001	3/24/14	17:48								
16	J1402003-002	3/24/14	17:53								
17	J1402003-003	3/24/14	17:58								
18	J1402003-004	3/24/14	18:03								
19	J1402025-001	3/24/14	18:08								
20	J1402025-002	3/24/14	18:13								
21	J1402025-003	3/24/14	18:18								
22	J1402025-004	3/24/14	18:23								
23	CCV-2	3/24/14	18:28								
24	CCB-2	3/24/14	18:33								
25	J1402025-005	3/24/14	18:38								
26	J1402025-006	3/24/14	18:43								
27	J1402025-007	3/24/14	18:48								
28	J1402026-001	3/24/14	18:53								
29	J1402026-001S	3/24/14	18:58								
30	J1402026-001SD	3/24/14	19:03								
31	J1402026-001L	3/24/14	19:08								
32	J1402026-001A	3/24/14	19:13								
33	J1402026-002	3/24/14	19:19								
34	J1402026-003	3/24/14	19:24								
35	CCV-3	3/24/14	19:29								
36	CCB-3	3/24/14	19:34								
37	J1402026-004	3/24/14	19:39								
38	J1402026-005	3/24/14	19:44								
39	J1402026-006	3/24/14	19:49								
40	J1402037-001	3/24/14	19:54								
41	J1402037-002	3/24/14	19:59								
42	J1402037-003	3/24/14	20:04								
43	J1401932-001 2x	3/24/14	20:09								
44	J1401932-002	3/24/14	20:14								
45	J1401932-003 2x	3/24/14	20:19								
46	J1401933-001 2x	3/24/14	20:24								
47	CCV-4	3/24/14	20:29								
48	CCB-4	3/24/14	20:34								

ICP-MS DATA REPORTED WITH FAILING CRITERIA

Data File ID: 032414A

Sample ID	Analyte	Failure(s)	Analyst's Comments

ICP-MS Isotope Discrepancy Summary Sheet

Sample ID	Isotope-1	Isotope-1 Conc (ug/L)	Isotope-2	Isotope-2 Conc (ug/L)	RPD	ANAL DATE / TIME
J1402025-001	**47Ti**	1.867	48Ti	35	179.7	3/24/2014 18:08
J1402025-002	**47Ti**	0.917	48Ti	20.39	182.8	3/24/2014 18:13
J1402025-003	**47Ti**	1.102	48Ti	15.61	173.6	3/24/2014 18:18
J1402025-004	**47Ti**	0.178	48Ti	15.82	195.5	3/24/2014 18:23
J1402025-005	**47Ti**	2.293	48Ti	21.55	161.5	3/24/2014 18:38
J1402025-007	**47Ti**	3.136	48Ti	29.74	161.8	3/24/2014 18:48
J1402026-001	**47Ti**	1.332	48Ti	40.25	187.2	3/24/2014 18:53
J1402026-001	**66Zn** ✓	10.91	68Zn	16.9	43.1	3/24/2014 18:53
J1402026-002	**47Ti**	12.39	48Ti	32.25	89	3/24/2014 19:19
J1402026-002	**66Zn** ✓	10.32	68Zn	14.6	34.3	3/24/2014 19:19
J1402026-003	**47Ti**	14.78	48Ti	31.12	71.2	3/24/2014 19:24
J1402026-003	**66Zn** ✓	12.02	68Zn	17.06	34.7	3/24/2014 19:24
J1402026-004	**47Ti**	5.861	48Ti	78.39	172.2	3/24/2014 19:39
J1402026-005	**47Ti**	6.278	48Ti	154.9	184.4	3/24/2014 19:44
J1402026-005	**66Zn** ✓	69.93	68Zn	108.4	43.1	3/24/2014 19:44
J1402026-006	**47Ti**	2.958	48Ti	57.53	180.4	3/24/2014 19:49
J1402026-006	**66Zn** ✓	16.36	68Zn	43.03	89.8	3/24/2014 19:49
J1402037-002	**47Ti**	0.538	48Ti	14.69	185.9	3/24/2014 19:59
J1402037-003	**47Ti**	0.805	48Ti	11.23	173.2	3/24/2014 20:04
J1401932-001 2x	**47Ti**	0.507	48Ti	80.66	197.5	3/24/2014 20:09
J1401932-002	**47Ti**	4.36	48Ti	22.18	134.3	3/24/2014 20:14

Isotopes Reported Other Than Defaults When Defaults Pass QC Checks

Data File ID: 032414A

Sample ID	Reported Isotope	Reported Conc	Default Isotope	Default Conc	Analyst's Comments

Excluded In Calib	Excluded In Results	Peak Run Excluded	Multi Element	Semi Quant	Internal Standard	Standard Addition

Uncorrected ICPS Per Mass

S-Calibration Has Edited Standard E-Calibration Edited I-Invalid Calibration V-Valley Integration Failed
F-Interference Correction Failed T-Tripped P-Pulse Counting M-Result Over Max

Run	Label	TimeStamp	5Bkg	7Li	9Be	24Mg	25Mg	26Mg
1	Stability_0321_3	3/24/2014 3:11:56 P	(P)0.000	(P)43750.052	(P)39125.732	(P)94660.606	(P)13566.444	(P)16357.145
2	Stability_0321_3	3/24/2014 3:12:25 P	(P)0.000	(P)35058.170	(P)42722.686	(P)95742.375	(P)13682.106	(P)16605.206
3	Stability_0321_3	3/24/2014 3:12:53 P	(P)0.000	(P)34381.047	(P)43268.769	(P)97117.071	(P)13618.711	(P)16926.692
4	Stability_0321_3	3/24/2014 3:13:22 P	(P)0.000	(P)38168.019	(P)40760.294	(P)95999.393	(P)13496.375	(P)16480.613
5	Stability_0321_3	3/24/2014 3:13:50 P	(P)0.000	(P)35467.864	(P)41976.031	(P)96600.173	(P)13598.698	(P)16556.255
	Mean of Stability_032	3/24/2014 3:11:56 P	(P)0.000	(P)37365.031	(P)41570.702	(P)96023.924	(P)13592.467	(P)16585.182
	SD of Stability_0321_3		(P)0.000	(P)3848.321	(P)1659.023	(P)930.798	(P)68.326	(P)212.605
	%RSD of Stability_		(P)0.000	(P)10.299	(P)3.991	(P)0.969	(P)0.503	(P)1.282

Run	Label	TimeStamp	59Co	138Ba++	113In	115In	138Ba	140Ce
1	Stability_0321_3	3/24/2014 3:11:56 P	(P)235730.540	(P)14554.078	(P)12279.721	(P)290913.760	(P)191477.140	(P)289962.070
2	Stability_0321_3	3/24/2014 3:12:25 P	(P)239761.970	(P)14559.641	(P)12579.981	(P)291989.930	(P)193901.820	(P)291786.850
3	Stability_0321_3	3/24/2014 3:12:53 P	(P)238351.250	(P)14609.689	(P)12513.256	(P)290568.760	(P)193416.150	(P)291582.980
4	Stability_0321_3	3/24/2014 3:13:22 P	(P)238806.430	(P)14596.342	(P)12741.235	(P)291942.070	(P)191848.680	(P)291145.000
5	Stability_0321_3	3/24/2014 3:13:50 P	(P)237663.380	(P)14382.793	(P)12730.114	(P)290401.100	(P)190392.610	(P)288092.740
	Mean of Stability_032	3/24/2014 3:11:56 P	(P)238062.710	(P)14540.509	(P)12568.861	(P)291163.120	(P)192207.280	(P)290513.930
	SD of Stability_0321_3		(P)1510.162	(P)91.280	(P)188.768	(P)756.057	(P)1439.405	(P)1527.103
	%RSD of Stability_		(P)0.634	(P)0.628	(P)1.502	(P)0.260	(P)0.749	(P)0.526

Run	Label	TimeStamp	154Ba O	156Ce O	175	206Pb	207Pb	208Pb
1	Stability_0321_3	3/24/2014 3:11:56 P	(P)165.557	(P)7120.664	(P)41.111	(P)88714.611	(P)74879.068	(P)188284.900
2	Stability_0321_3	3/24/2014 3:12:25 P	(P)173.334	(P)7321.877	(P)25.556	(P)89699.641	(P)75255.487	(P)188657.670
3	Stability_0321_3	3/24/2014 3:12:53 P	(P)157.779	(P)7506.416	(P)33.333	(P)89252.390	(P)75147.135	(P)187317.890
4	Stability_0321_3	3/24/2014 3:13:22 P	(P)177.779	(P)7157.349	(P)23.333	(P)89609.061	(P)74795.302	(P)186787.670
5	Stability_0321_3	3/24/2014 3:13:50 P	(P)151.112	(P)7185.140	(P)18.889	(P)89154.039	(P)75481.118	(P)188201.610
	Mean of Stability_032	3/24/2014 3:11:56 P	(P)165.112	(P)7258.289	(P)28.444	(P)89285.948	(P)75111.622	(P)187849.950
	SD of Stability_0321_3		(P)10.932	(P)158.186	(P)8.805	(P)393.858	(P)279.565	(P)770.844
	%RSD of Stability_		(P)6.621	(P)2.179	(P)30.956	(P)0.441	(P)0.372	(P)0.410

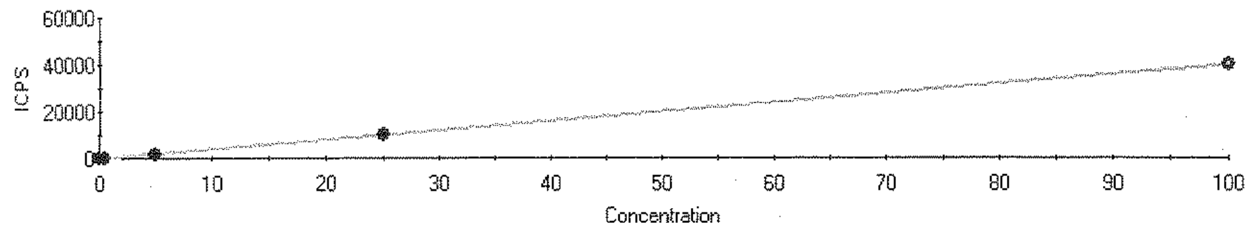
Run	Label	TimeStamp	209Bi	220Bkg	238U
1	Stability_0321_3	3/24/2014 3:11:56 P	(P)286577.110	(P)0.000	(P)395995.720
2	Stability_0321_3	3/24/2014 3:12:25 P	(P)290849.970	(P)0.000	401670.130
3	Stability_0321_3	3/24/2014 3:12:53 P	(P)287950.900	(P)0.000	400162.880
4	Stability_0321_3	3/24/2014 3:13:22 P	(P)289573.210	(P)0.000	397054.740
5	Stability_0321_3	3/24/2014 3:13:50 P	(P)284713.870	(P)0.000	398607.100
	Mean of Stability_032	3/24/2014 3:11:56 P	(P)287933.010	(P)0.000	398698.110
	SD of Stability_0321_3		(P)2418.705	(P)0.000	2290.758
	%RSD of Stability_		(P)0.840	(P)0.000	0.575

ICP-MS MASS CALIBRATION SUMMARY SHEET

Data File ID: 032414A

Element	Mass	Mass DAC	Peak Width (AMU)	Error (AMU)	Include	Resolution PASS / FAIL (< 0.9 AMU)	Accuracy PASS / FAIL (+/- 0.1 AMU)
Be	9.012	2012	0.715	0.03	TRUE	PASS	PASS
Mg	23.985	5825	0.664	0.043	TRUE	PASS	PASS
Mg	24.986	6079	0.715	0.04	TRUE	PASS	PASS
Mg	25.983	6326	0.715	0.014	TRUE	PASS	PASS
Al	26.982	6586	0.715	0.037	TRUE	PASS	PASS
Ti	46.952	11663	0.715	0.014	TRUE	PASS	PASS
V	50.944	12677	0.715	0.006	TRUE	PASS	PASS
Cr	51.94	12930	0.766	0.003	TRUE	PASS	PASS
Mn	54.938	13691	0.715	-0.005	TRUE	PASS	PASS
Co	58.933	14705	0.715	-0.018	TRUE	PASS	PASS
Ni	59.931	14958	0.766	-0.022	TRUE	PASS	PASS
Cu	64.928	16232	0.766	-0.015	TRUE	PASS	PASS
Zn	65.926	16479	0.766	-0.043	TRUE	PASS	PASS
As	74.922	18767	0.766	-0.053	TRUE	PASS	PASS
Se	77.919	19534	0.766	-0.039	TRUE	PASS	PASS
Sr	85.91	21577	0.766	-0.008	TRUE	PASS	PASS
Mo	97.905	24632	0.765	-0.01	TRUE	PASS	PASS
Ag	108.905	27434	0.714	-0.011	TRUE	PASS	PASS
Cd	113.903	28714	0.663	0.014	TRUE	PASS	PASS
Sn	117.902	29735	0.714	0.022	TRUE	PASS	PASS
Sb	122.904	31015	0.663	0.043	TRUE	PASS	PASS
Ba	136.906	34577	0.663	0.017	TRUE	PASS	PASS
Tl	204.972	51932	0.662	0.005	TRUE	PASS	PASS
Pb	205.974	52186	0.713	-0.002	TRUE	PASS	PASS
Pb	206.976	52439	0.662	-0.012	TRUE	PASS	PASS
Pb	207.977	52699	0.662	0.006	TRUE	PASS	PASS

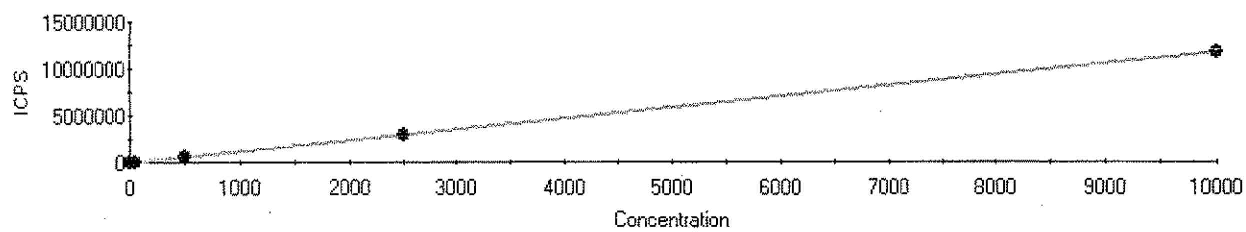
Fully Quant Calibration 9Be FQ Block 1



Intercept CPS=48.213569 Intercept Conc=0.120695
Sensitivity=399.467436 Correlation Coeff=0.997550

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.01	0.01	51.69	
Cal 1	0.50	0.40	-0.10	209.93	-0.10
Cal 2	5.00	4.37	-0.63	1,795.61	-0.63
Cal 3	25.00	25.17	0.17	10,103.56	0.17
Cal 4	100.00	100.40	0.40	40,156.51	0.40

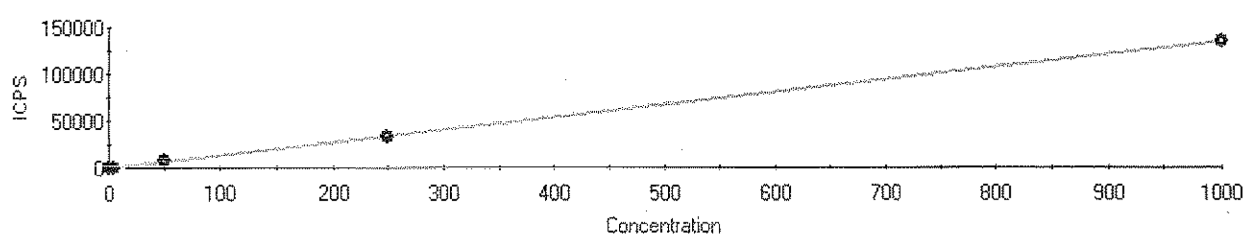
Fully Quant Calibration 27Al FQ Block 1



Intercept CPS=2675.986233 Intercept Conc=2.271551
Sensitivity=1178.043394 Correlation Coeff=0.999646

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.01	0.01	2,689.77	
Cal 1	50.00	48.20	-1.80	59,459.10	-1.80
Cal 2	500.00	500.24	0.24	591,975.57	0.24
Cal 3	2,500.00	2,504.29	4.29	2,952,842.39	4.29
Cal 4	10,000.00	10,028.88	28.88	11,817,128.06	28.88

Fully Quant Calibration 47Ti FQ Block 1



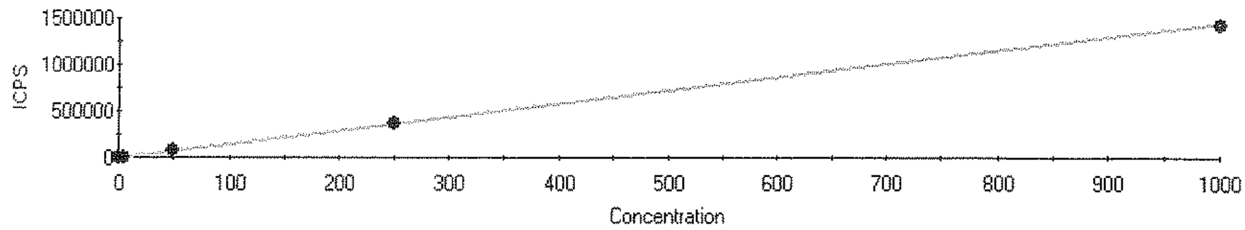
Intercept CPS=62.205747 Intercept Conc=0.464840
Sensitivity=133.821777 Correlation Coeff=0.998464

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.36	0.36	110.97	
Cal 1	5.00	4.86	-0.14	711.96	-0.14
Cal 2	50.00	50.00	0.00	6,752.84	0.00
Cal 3	250.00	249.35	-0.65	33,430.84	-0.65

293

Cal 4	1,000.00	1,010.86	10.86	135,337.04	10.86

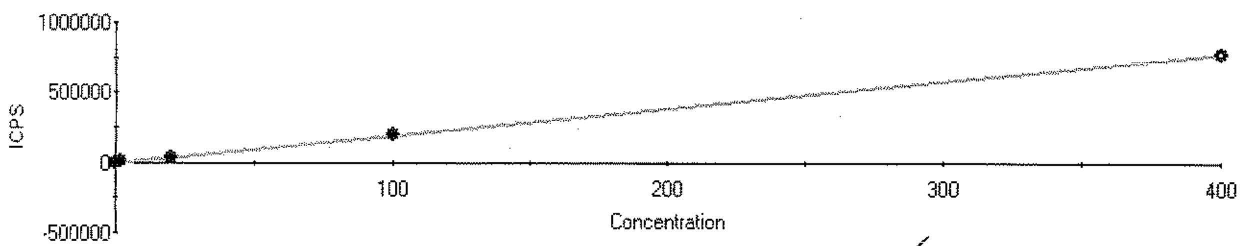
Fully Quant Calibration 48Ti FQ Block 1



Intercept CPS=1440.761960 Intercept Conc=1.006075
Sensitivity=1432.062723 Correlation Coeff=0.999825

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.27	0.27	1,823.34	
Cal 1	5.00	4.79	-0.21	8,304.73	-0.21
Cal 2	50.00	50.02	0.02	73,079.03	0.02
Cal 3	250.00	250.31	0.31	359,898.75	0.31
Cal 4	1,000.00	996.53	-3.47	1,428,536.47	-3.47

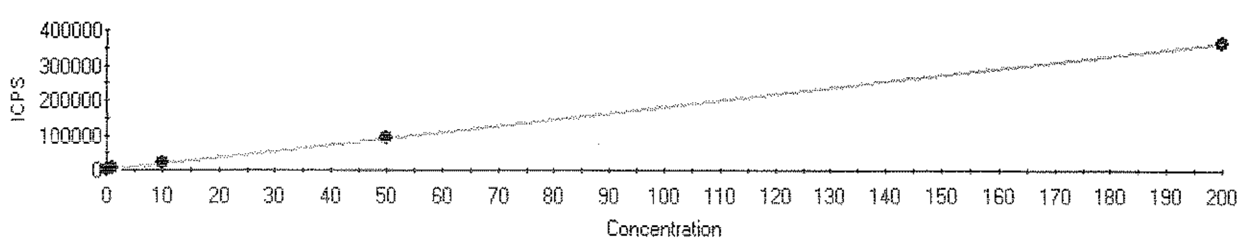
Fully Quant Calibration 51V FQ Block 1



Intercept CPS=-493.306902 Intercept Conc=-0.254209
Sensitivity=1940.558918 Correlation Coeff=0.999917

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.25	0.25	-16.75	
Cal 1	2.00	1.76	-0.24	2,929.51	-0.24
Cal 2	20.00	20.06	0.06	38,442.18	0.06
Cal 3	100.00	100.18	0.18	193,904.43	0.18
Cal 4	400.00	395.56	-4.44	767,119.03	-4.44

Fully Quant Calibration 52Cr FQ Block 1

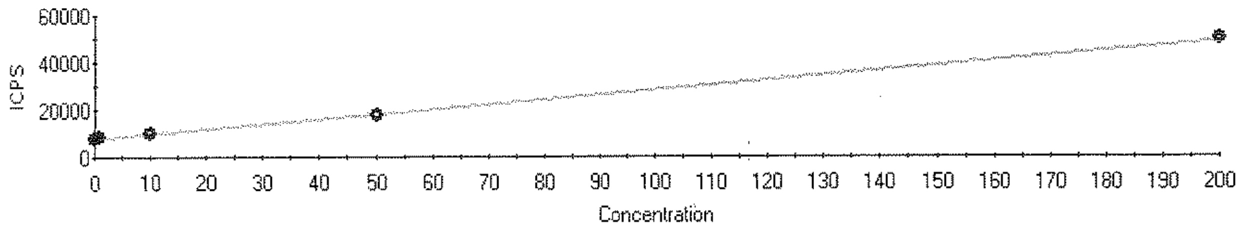


Intercept CPS=2138.580681 Intercept Conc=1.186132
Sensitivity=1802.986912 Correlation Coeff=0.999934

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	2,144.29	
Cal 1	1.00	0.99	-0.01	3,928.11	-0.01
Cal 2	10.00	9.99	-0.01	20,150.04	-0.01

Cal 3	50.00	50.37	0.37	92,947.63	0.37
Cal 4	200.00	199.38	-0.62	361,626.03	-0.62

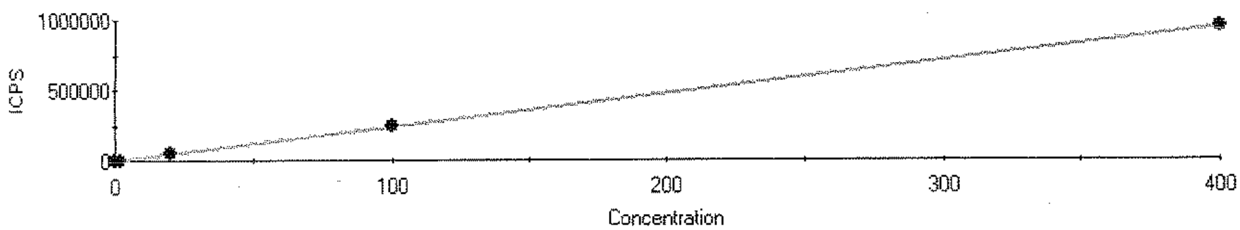
Fully Quant Calibration 53Cr FQ Block 1



Intercept CPS=7910.763203 Intercept Conc=37.989312
Sensitivity=208.236546 Correlation Coeff=0.999804

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.33	-0.33	7,841.76	
Cal 1	1.00	2.36	1.36	8,401.92	1.36
Cal 2	10.00	10.38	0.38	10,072.70	0.38
Cal 3	50.00	48.16	-1.84	17,938.46	-1.84
Cal 4	200.00	200.44	0.44	49,648.71	0.44

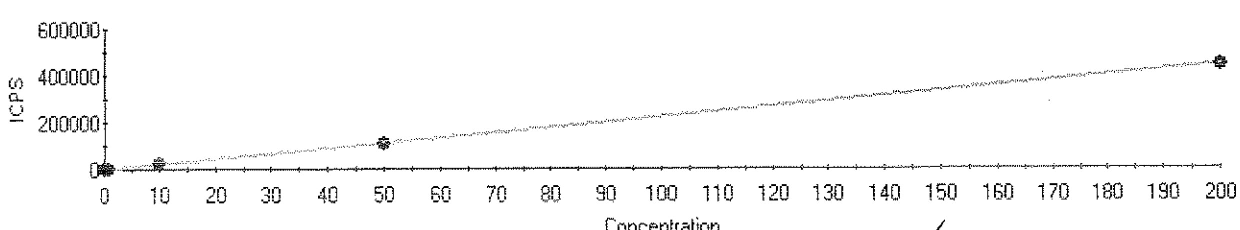
Fully Quant Calibration 55Mn FQ Block 1



Intercept CPS=128.405884 Intercept Conc=0.054019
Sensitivity=2377.048232 Correlation Coeff=0.999870

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	128.21	
Cal 1	2.00	2.06	0.06	5,017.06	0.06
Cal 2	20.00	20.49	0.49	48,838.18	0.49
Cal 3	100.00	100.99	0.99	240,185.46	0.99
Cal 4	400.00	398.63	-1.37	947,701.82	-1.37

Fully Quant Calibration 59Co FQ Block 1



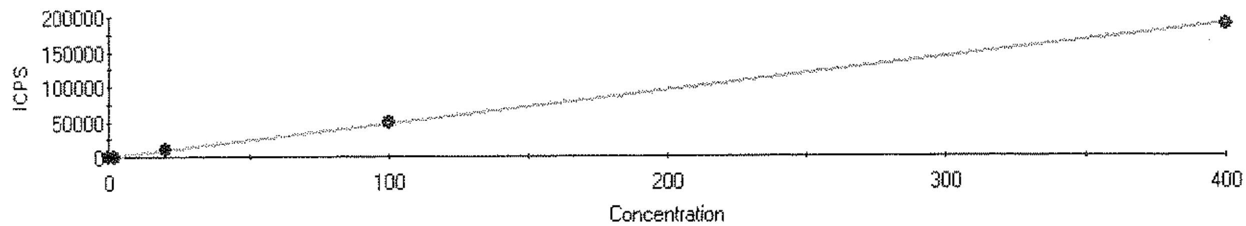
Intercept CPS=28.466988 Intercept Conc=0.012870
Sensitivity=2211.914211 Correlation Coeff=0.999869

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	29.91	
Cal 1	1.00	0.97	-0.03	2,171.40	-0.03

295

Cal 2	10.00	10.23	0.23	22,664.04	0.23
Cal 3	50.00	50.34	0.34	111,379.55	0.34
Cal 4	200.00	199.62	-0.38	441,559.94	-0.38

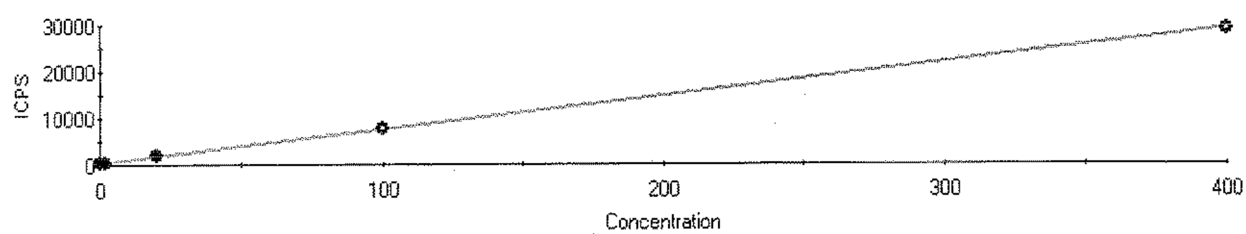
Fully Quant Calibration 60Ni FQ Block 1



Intercept CPS=13.633276 Intercept Conc=0.028917
Sensitivity=471.464266 Correlation Coeff=0.999558

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	13.67	
Cal 1	2.00	1.95	-0.05	931.46	-0.05
Cal 2	20.00	20.60	0.60	9,724.86	0.60
Cal 3	100.00	100.96	0.96	47,611.05	0.96
Cal 4	400.00	397.91	-2.09	187,613.45	-2.09

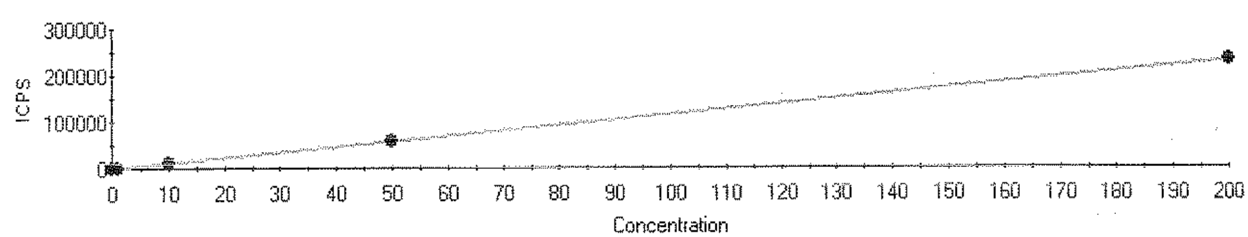
Fully Quant Calibration 62Ni FQ Block 1



Intercept CPS=260.829475 Intercept Conc=3.582402
Sensitivity=72.808554 Correlation Coeff=0.996765

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.44	-0.44	229.07	
Cal 1	2.00	2.51	0.51	443.27	0.51
Cal 2	20.00	21.01	1.01	1,790.48	1.01
Cal 3	100.00	101.72	1.72	7,666.89	1.72
Cal 4	400.00	394.14	-5.86	28,957.67	-5.86

Fully Quant Calibration 63Cu FQ Block 1

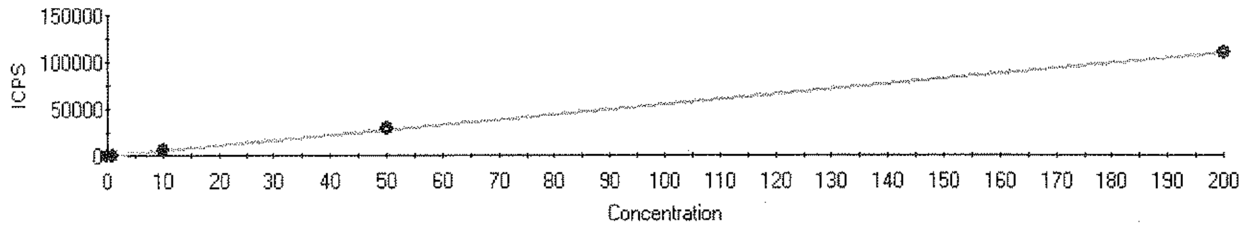


Intercept CPS=356.724543 Intercept Conc=0.307634
Sensitivity=1159.575468 Correlation Coeff=0.999845

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	353.83	

Cal 1	1.00	0.97	-0.03	1,478.83	-0.03
Cal 2	10.00	10.06	0.06	12,025.52	0.06
Cal 3	50.00	50.43	0.43	58,828.57	0.43
Cal 4	200.00	198.64	-1.36	230,699.80	-1.36

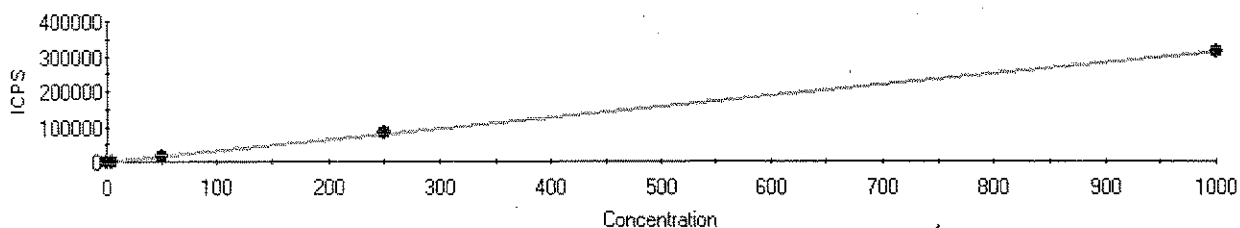
Fully Quant Calibration 65Cu FQ Block 1



Intercept CPS=133.376351 Intercept Conc=0.241952
Sensitivity=551.251871 Correlation Coeff=0.999961

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.01	-0.01	129.88	
Cal 1	1.00	0.94	-0.06	649.60	-0.06
Cal 2	10.00	10.01	0.01	5,653.34	0.01
Cal 3	50.00	50.42	0.42	27,929.30	0.42
Cal 4	200.00	199.05	-0.95	109,862.25	-0.95

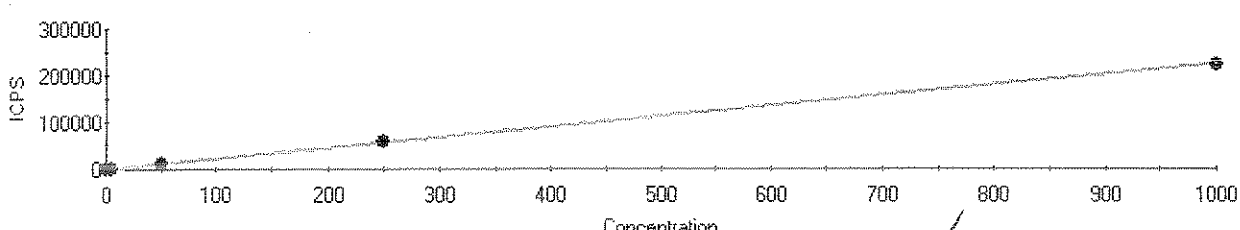
Fully Quant Calibration 66Zn FQ Block 1



Intercept CPS=143.275967 Intercept Conc=0.456266
Sensitivity=314.018456 Correlation Coeff=0.999776

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.05	-0.05	126.51	
Cal 1	5.00	5.16	0.16	1,764.56	0.16
Cal 2	50.00	52.00	2.00	16,470.92	2.00
Cal 3	250.00	255.31	5.31	80,315.13	5.31
Cal 4	1,000.00	995.19	-4.81	312,650.31	-4.81

Fully Quant Calibration 68Zn FQ Block 1

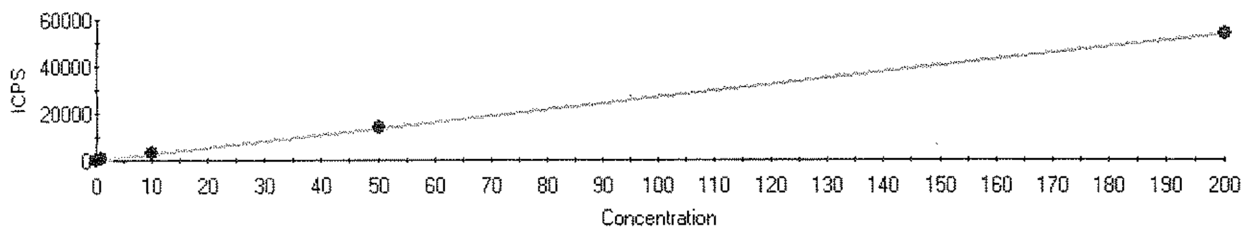


Intercept CPS=82.519178 Intercept Conc=0.361137
Sensitivity=228.498118 Correlation Coeff=0.999043

Label	Defined	Measured	Error	Mean CPS	%Error

Cal Blank	0.00	-0.05	-0.05	70.09	
Cal 1	5.00	5.17	0.17	1,263.94	0.17
Cal 2	50.00	51.25	1.25	11,794.15	1.25
Cal 3	250.00	251.83	1.83	57,625.48	1.83
Cal 4	1,000.00	981.82	-18.18	224,425.58	-18.18

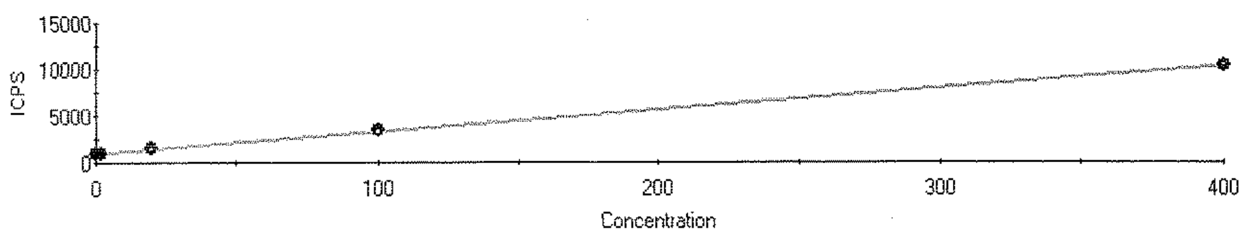
Fully Quant Calibration 75As FQ Block 1



Intercept CPS=267.579216 Intercept Conc=0.993602
Sensitivity=269.302193 Correlation Coeff=0.999905

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.11	-0.11	237.77	
Cal 1	1.00	1.04	0.04	546.72	0.04
Cal 2	10.00	9.86	-0.14	2,922.20	-0.14
Cal 3	50.00	50.72	0.72	13,927.51	0.72
Cal 4	200.00	199.70	-0.30	54,047.44	-0.30

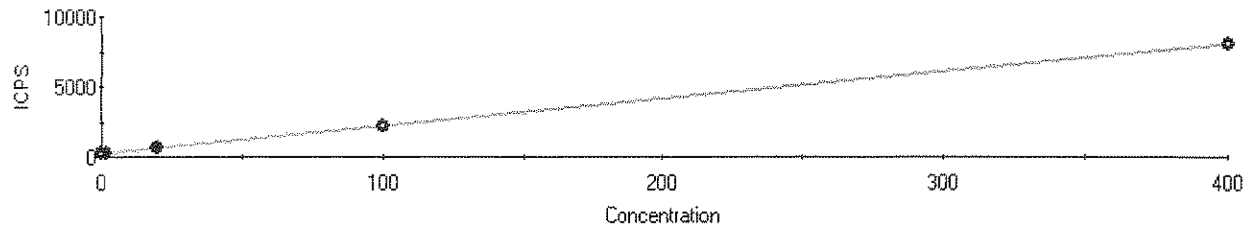
Fully Quant Calibration 76Se FQ Block 1



Intercept CPS=939.343373 Intercept Conc=39.596670
Sensitivity=23.722787 Correlation Coeff=0.995828

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	1.69	1.69	979.53	
Cal 1	2.00	0.25	-1.75	945.21	-1.75
Cal 2	20.00	24.32	4.32	1,516.32	4.32
Cal 3	100.00	102.85	2.85	3,379.26	2.85
Cal 4	400.00	399.64	-0.36	10,419.84	-0.36

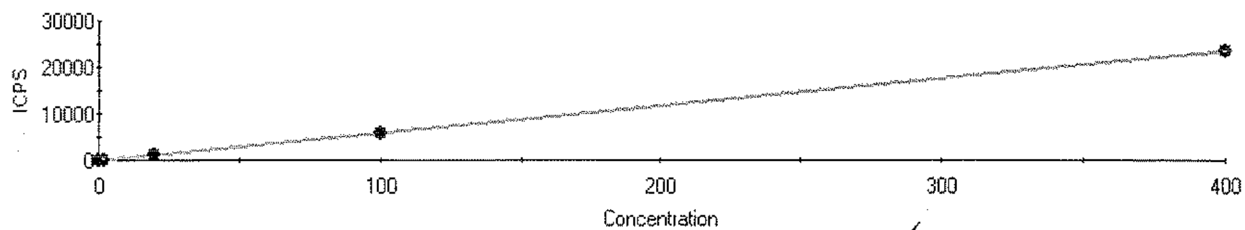
Fully Quant Calibration 77Se FQ Block 1



Intercept CPS=218.778520 Intercept Conc=11.138968
Sensitivity=19.640825 Correlation Coeff=0.999754

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.22	0.22	223.03	
Cal 1	2.00	1.37	-0.63	245.75	-0.63
Cal 2	20.00	21.78	1.78	646.48	1.78
Cal 3	100.00	99.43	-0.57	2,171.73	-0.57
Cal 4	400.00	399.78	-0.22	8,070.81	-0.22

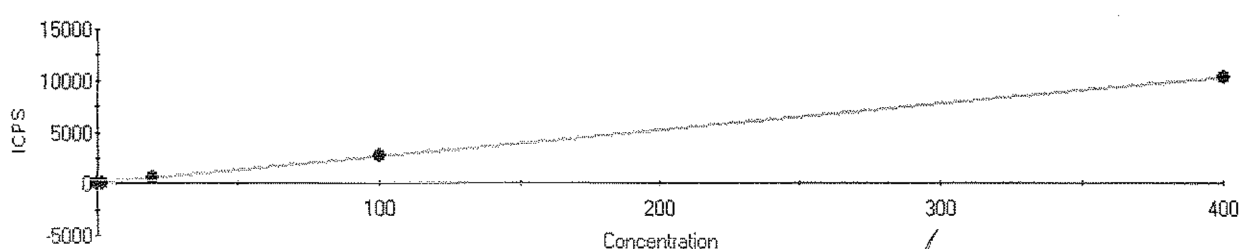
Fully Quant Calibration 78Se FQ Block 1



Intercept CPS=38.902200 Intercept Conc=0.662571
Sensitivity=58.714048 Correlation Coeff=0.999970

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.01	-0.01	38.41	
Cal 1	2.00	2.23	0.23	169.72	0.23
Cal 2	20.00	19.90	-0.10	1,207.33	-0.10
Cal 3	100.00	100.22	0.22	5,923.50	0.22
Cal 4	400.00	397.38	-2.62	23,370.93	-2.62

Fully Quant Calibration 82Se FQ Block 1

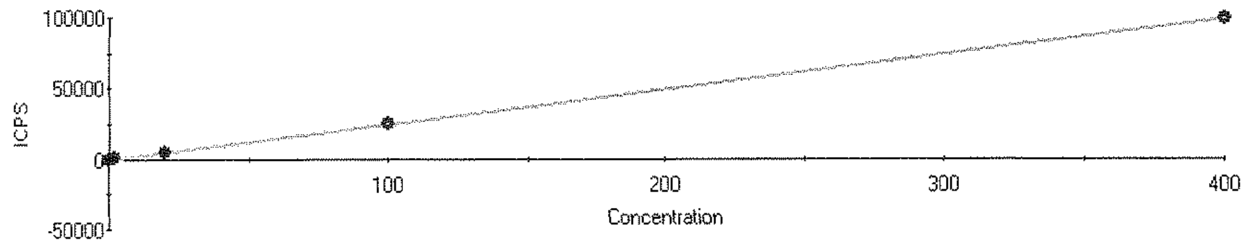


Intercept CPS=3.425689 Intercept Conc=0.132306
Sensitivity=25.892078 Correlation Coeff=0.999983

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.40	-0.40	-6.98	
Cal 1	2.00	2.06	0.06	56.84	0.06
Cal 2	20.00	19.79	-0.21	515.92	-0.21
Cal 3	100.00	102.79	2.79	2,664.84	2.79

Cal 4	400.00	399.93	-0.07	10,358.56	-0.07

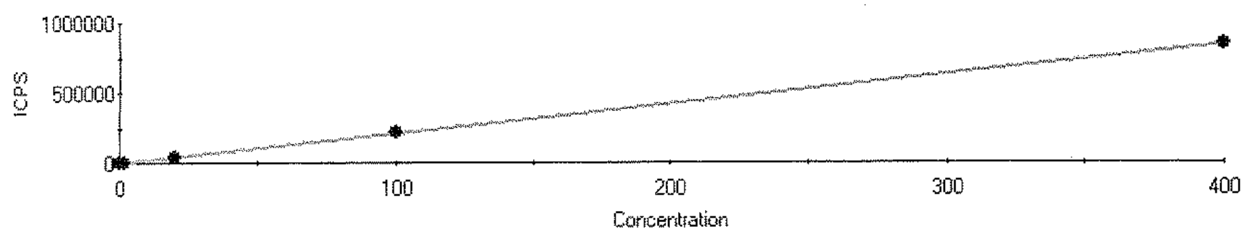
Fully Quant Calibration 86Sr FQ Block 1



Intercept CPS=10.843945 Intercept Conc=0.044187
Sensitivity=245.409753 Correlation Coeff=0.999981

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.01	-0.01	8.99	
Cal 1	2.00	2.15	0.15	538.09	0.15
Cal 2	20.00	19.85	-0.15	4,882.22	-0.15
Cal 3	100.00	100.17	0.17	24,593.18	0.17
Cal 4	400.00	400.00	0.00	98,174.91	0.00

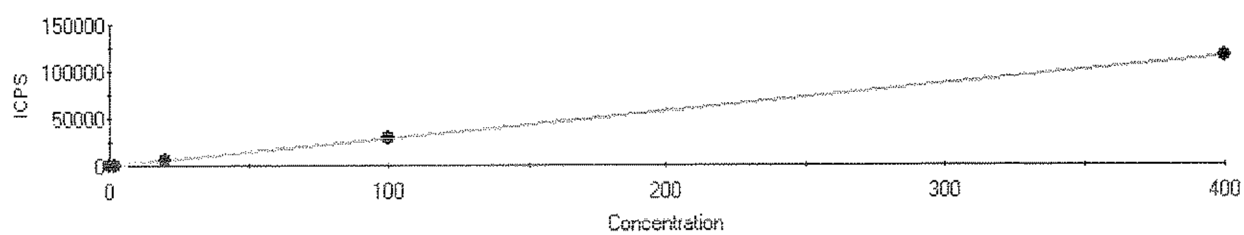
Fully Quant Calibration 88Sr FQ Block 1



Intercept CPS=50.307122 Intercept Conc=0.023622
Sensitivity=2129.668402 Correlation Coeff=0.999871

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	47.88	
Cal 1	2.00	2.05	0.05	4,423.23	0.05
Cal 2	20.00	20.45	0.45	43,610.38	0.45
Cal 3	100.00	100.38	0.38	213,824.84	0.38
Cal 4	400.00	398.76	-1.24	849,281.18	-1.24

Fully Quant Calibration 97Mo FQ Block 1



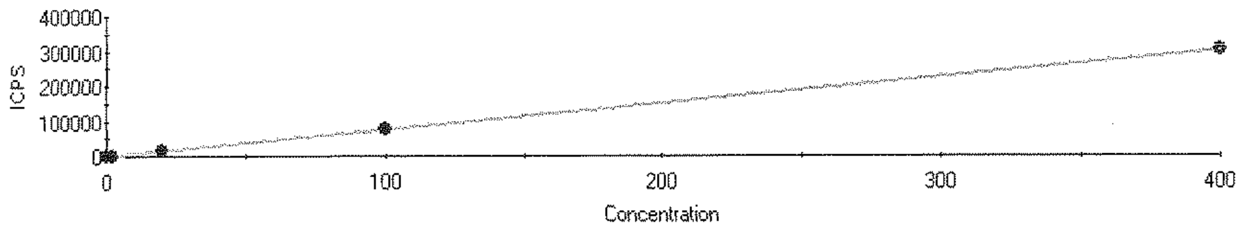
Intercept CPS=30.380927 Intercept Conc=0.105586
Sensitivity=287.735089 Correlation Coeff=0.999993

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	30.76	
Cal 1	2.00	1.96	-0.04	595.53	-0.04
Cal 2	20.00	20.61	0.61	5,959.40	0.61

300

Cal 3	100.00	101.16	1.16	29,137.85	1.16
Cal 4	400.00	399.92	-0.08	115,102.81	-0.08

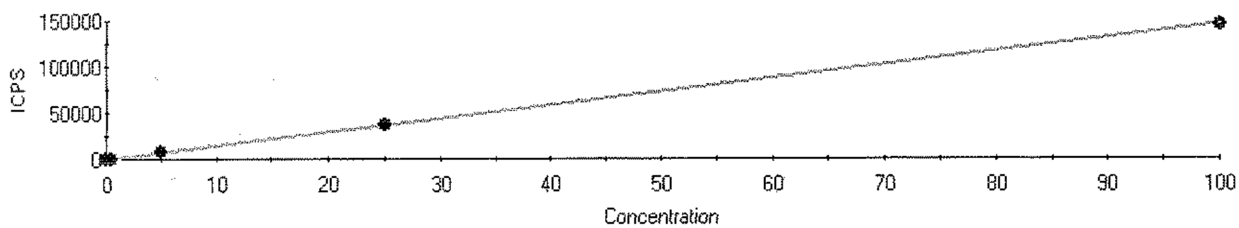
Fully Quant Calibration 98Mo FQ Block 1



Intercept CPS=73.758118 Intercept Conc=0.097256
Sensitivity=758.392125 Correlation Coeff=0.999489

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	74.38	
Cal 1	2.00	1.92	-0.08	1,532.11	-0.08
Cal 2	20.00	20.60	0.60	15,700.05	0.60
Cal 3	100.00	99.78	-0.22	75,746.03	-0.22
Cal 4	400.00	396.49	-3.51	300,770.39	-3.51

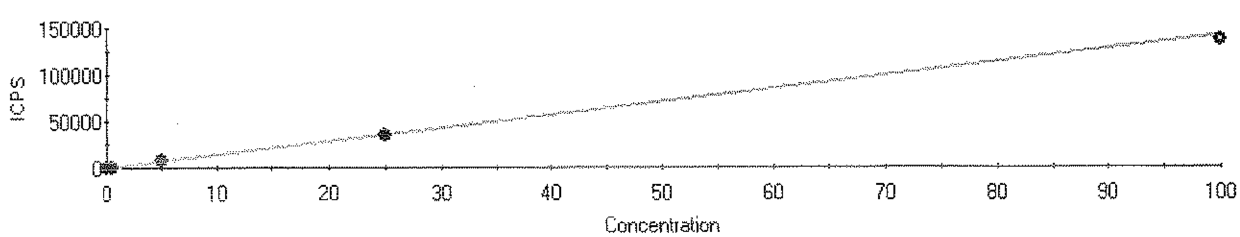
Fully Quant Calibration 107Ag FQ Block 1



Intercept CPS=164.564234 Intercept Conc=0.112721
Sensitivity=1459.923579 Correlation Coeff=0.999201

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	168.34	
Cal 1	0.50	0.47	-0.03	844.57	-0.03
Cal 2	5.00	5.07	0.07	7,566.01	0.07
Cal 3	25.00	25.26	0.26	37,046.57	0.26
Cal 4	100.00	99.02	-0.98	144,722.61	-0.98

Fully Quant Calibration 109Ag FQ Block 1

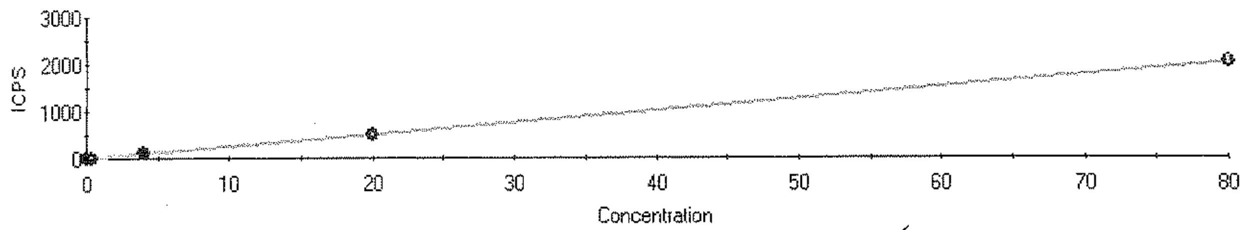


Intercept CPS=150.519243 Intercept Conc=0.106384
Sensitivity=1414.866139 Correlation Coeff=0.999374

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	147.02	
Cal 1	0.50	0.44	-0.06	774.12	-0.06

Cal 2	5.00	5.04	0.04	7,287.12	0.04
Cal 3	25.00	24.67	-0.33	35,056.16	-0.33
Cal 4	100.00	96.52	-3.48	136,716.32	-3.48

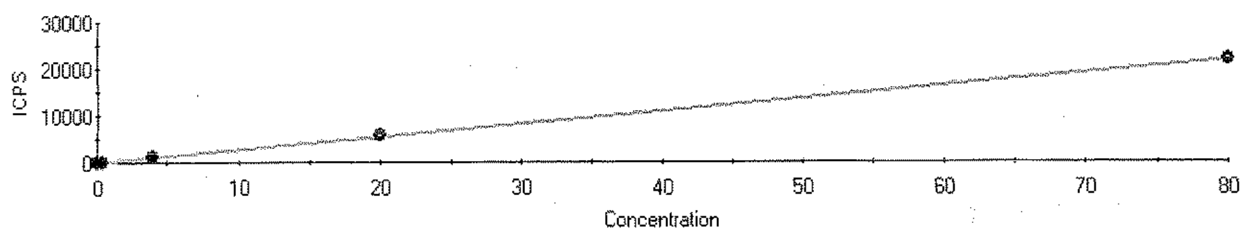
Fully Quant Calibration 106Cd FQ Block 1



Intercept CPS=4.488294 Intercept Conc=0.178192
Sensitivity=25.187970 Correlation Coeff=0.999919

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.08	-0.08	2.56	
Cal 1	0.40	0.27	-0.13	11.33	-0.13
Cal 2	4.00	4.48	0.48	117.41	0.48
Cal 3	20.00	19.66	-0.34	499.69	-0.34
Cal 4	80.00	80.06	0.06	2,021.07	0.06

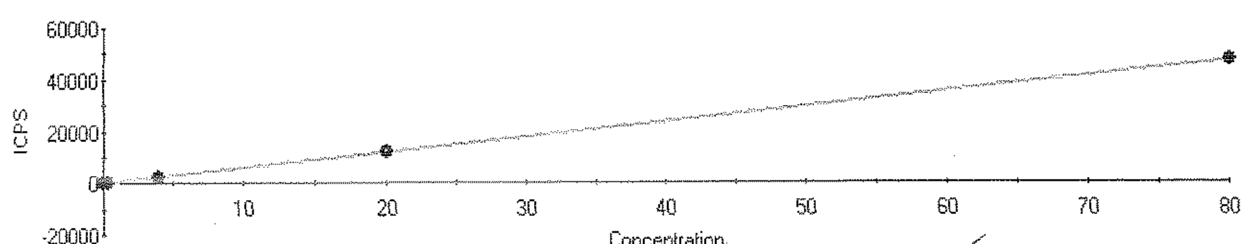
Fully Quant Calibration 111Cd FQ Block 1



Intercept CPS=4.408016 Intercept Conc=0.016047
Sensitivity=274.695279 Correlation Coeff=0.999786

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	3.65	
Cal 1	0.40	0.46	0.06	131.25	0.06
Cal 2	4.00	4.02	0.02	1,108.85	0.02
Cal 3	20.00	20.53	0.53	5,643.89	0.53
Cal 4	80.00	79.84	-0.16	21,935.38	-0.16

Fully Quant Calibration 114Cd FQ Block 1

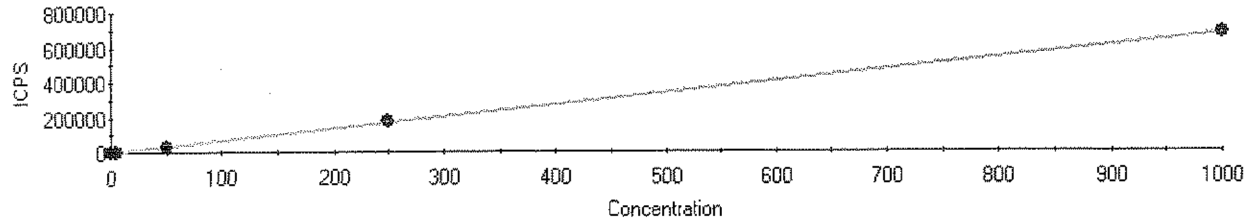


Intercept CPS=-4.026334 Intercept Conc=-0.006772
Sensitivity=594.555572 Correlation Coeff=0.999983

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	-6.67	

Cal 1	0.40	0.42	0.02	242.74	0.02
Cal 2	4.00	4.06	0.06	2,412.69	0.06
Cal 3	20.00	20.40	0.40	12,125.63	0.40
Cal 4	80.00	79.96	-0.04	47,536.92	-0.04

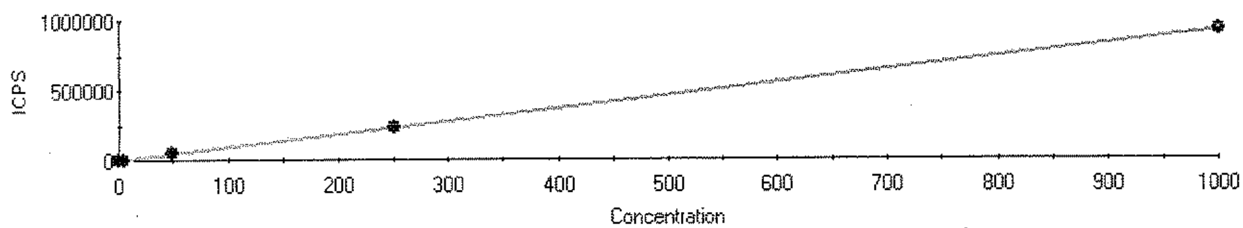
Fully Quant Calibration 118Sn FQ Block 1



Intercept CPS=1243.440780 Intercept Conc=1.843482
Sensitivity=674.506430 Correlation Coeff=0.999858

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.35	0.35	1,482.53	
Cal 1	5.00	4.39	-0.61	4,201.69	-0.61
Cal 2	50.00	50.03	0.03	34,989.98	0.03
Cal 3	250.00	249.45	-0.55	169,502.00	-0.55
Cal 4	1,000.00	1,002.01	2.01	677,103.55	2.01

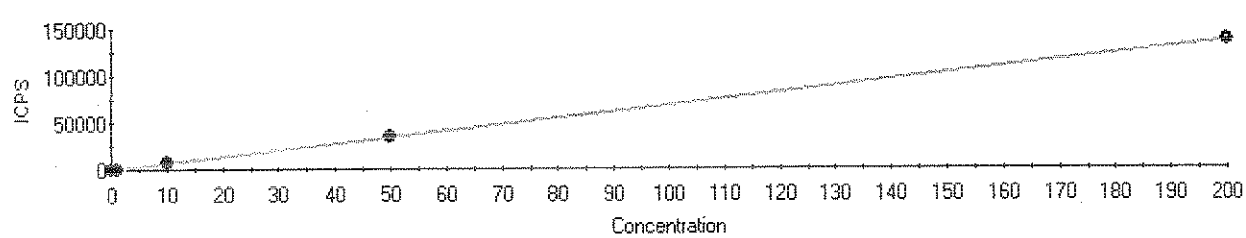
Fully Quant Calibration 120Sn FQ Block 1



Intercept CPS=1815.220441 Intercept Conc=1.972094
Sensitivity=920.453448 Correlation Coeff=0.997800

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.36	0.36	2,146.33	
Cal 1	5.00	4.29	-0.71	5,764.58	-0.71
Cal 2	50.00	49.82	-0.18	47,672.84	-0.18
Cal 3	250.00	249.88	-0.12	231,822.23	-0.12
Cal 4	1,000.00	1,006.30	6.30	928,065.82	6.30

Fully Quant Calibration 121Sb FQ Block 1



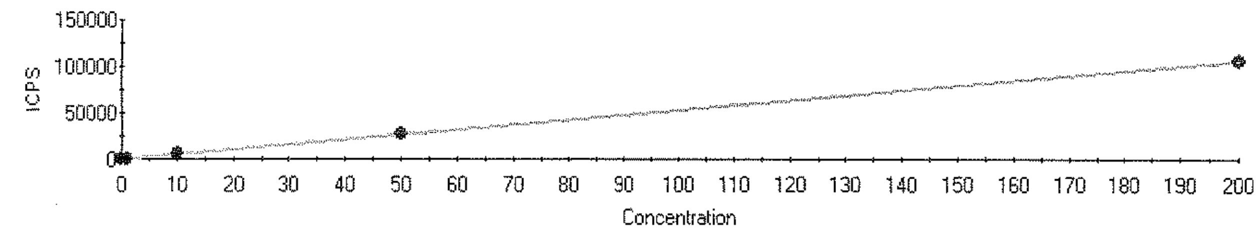
Intercept CPS=123.051137 Intercept Conc=0.179537
Sensitivity=685.379698 Correlation Coeff=0.999990

Label	Defined	Measured	Error	Mean CPS	%Error

303

Cal Blank	0.00	0.00	0.00	123.09	
Cal 1	1.00	0.98	-0.02	793.02	-0.02
Cal 2	10.00	9.96	-0.04	6,946.81	-0.04
Cal 3	50.00	50.13	0.13	34,478.10	0.13
Cal 4	200.00	199.72	-0.28	137,007.14	-0.28

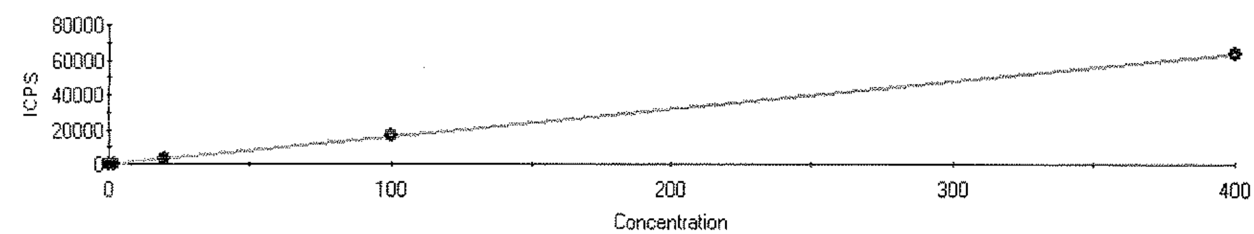
Fully Quant Calibration 123Sb FQ Block 1



Intercept CPS=108.273715 Intercept Conc=0.206266
Sensitivity=524.922376 Correlation Coeff=0.999976

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	108.45	
Cal 1	1.00	0.93	-0.07	597.79	-0.07
Cal 2	10.00	10.03	0.03	5,372.44	0.03
Cal 3	50.00	50.09	0.09	26,400.43	0.09
Cal 4	200.00	199.65	-0.35	104,906.44	-0.35

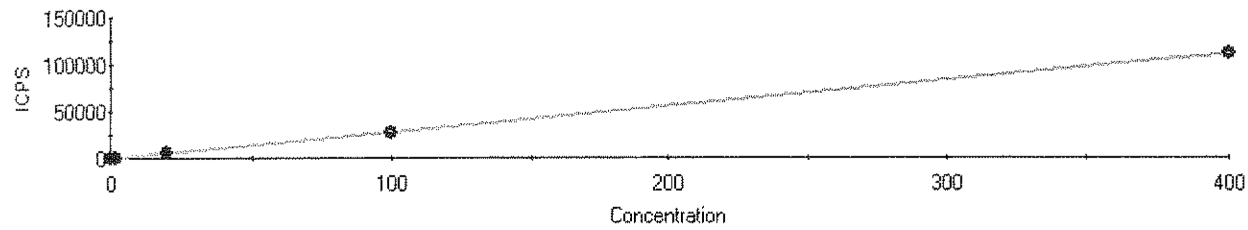
Fully Quant Calibration 135Ba FQ Block 1



Intercept CPS=12.211959 Intercept Conc=0.076614
Sensitivity=159.396588 Correlation Coeff=0.999400

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.03	-0.03	7.70	
Cal 1	2.00	2.07	0.07	342.40	0.07
Cal 2	20.00	20.06	0.06	3,209.39	0.06
Cal 3	100.00	99.79	-0.21	15,918.65	-0.21
Cal 4	400.00	397.48	-2.52	63,369.01	-2.52

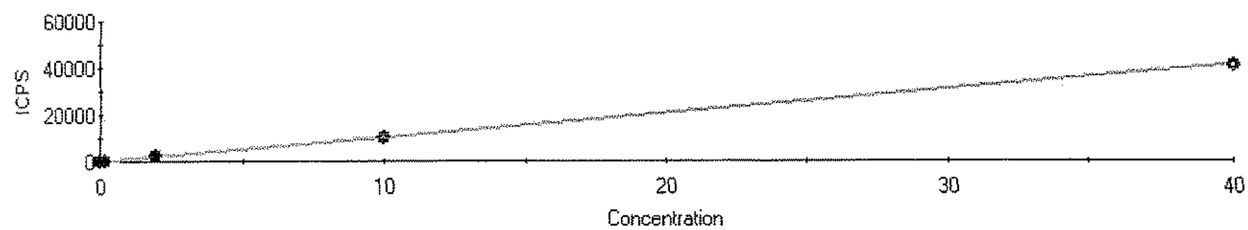
Fully Quant Calibration 137Ba FQ Block 1



Intercept CPS=13.570545 Intercept Conc=0.049090
Sensitivity=276.444878 Correlation Coeff=0.999997

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.01	0.01	15.35	
Cal 1	2.00	1.94	-0.06	549.47	-0.06
Cal 2	20.00	20.21	0.21	5,601.22	0.21
Cal 3	100.00	100.78	0.78	27,872.86	0.78
Cal 4	400.00	399.97	-0.03	110,584.07	-0.03

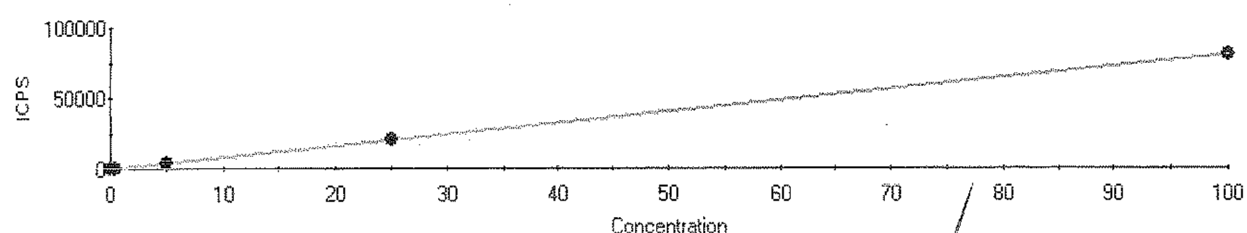
Fully Quant Calibration 203Tl FQ Block 1



Intercept CPS=80.001716 Intercept Conc=0.077159
Sensitivity=1036.848759 Correlation Coeff=0.999970

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.01	-0.01	71.01	
Cal 1	0.20	0.14	-0.06	229.39	-0.06
Cal 2	2.00	2.00	0.00	2,155.14	0.00
Cal 3	10.00	9.91	-0.09	10,351.08	-0.09
Cal 4	40.00	39.35	-0.65	40,880.04	-0.65

Fully Quant Calibration 206Pb FQ Block 1

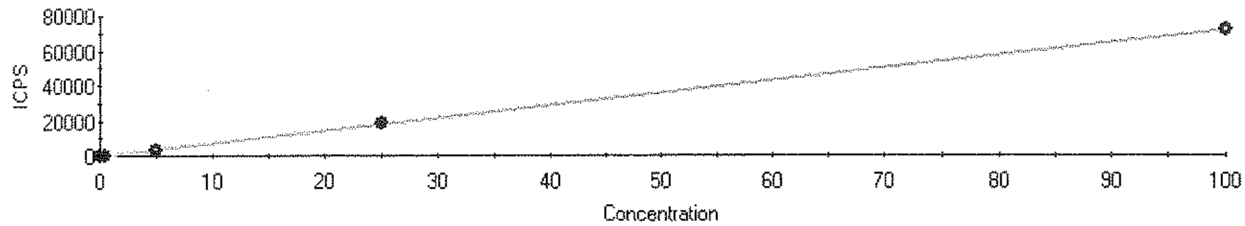


Intercept CPS=108.594167 Intercept Conc=0.135360
Sensitivity=802.260782 Correlation Coeff=0.999983

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.10	-0.10	29.09	
Cal 1	0.50	0.41	-0.09	436.18	-0.09
Cal 2	5.00	4.95	-0.05	4,081.38	-0.05
Cal 3	25.00	25.31	0.31	20,417.49	0.31

Cal 4	100.00	99.92	-0.08	80,273.87	-0.08

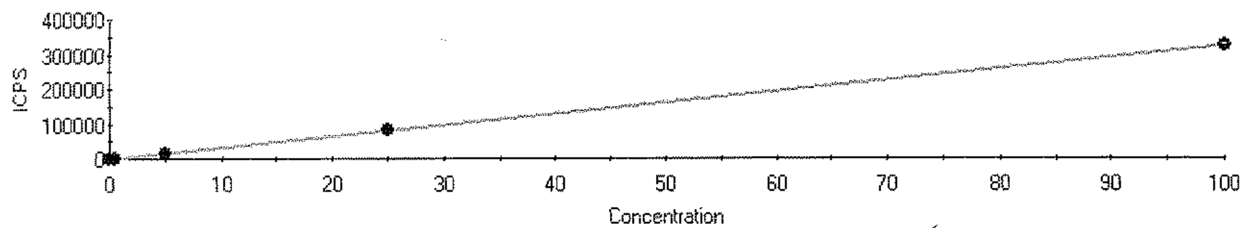
Fully Quant Calibration 207Pb FQ Block 1



Intercept CPS=99.356218 Intercept Conc=0.138947
Sensitivity=715.063484 Correlation Coeff=0.999968

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.10	-0.10	24.82	
Cal 1	0.50	0.42	-0.08	399.18	-0.08
Cal 2	5.00	4.85	-0.15	3,569.78	-0.15
Cal 3	25.00	25.43	0.43	18,284.74	0.43
Cal 4	100.00	99.90	-0.10	71,534.04	-0.10

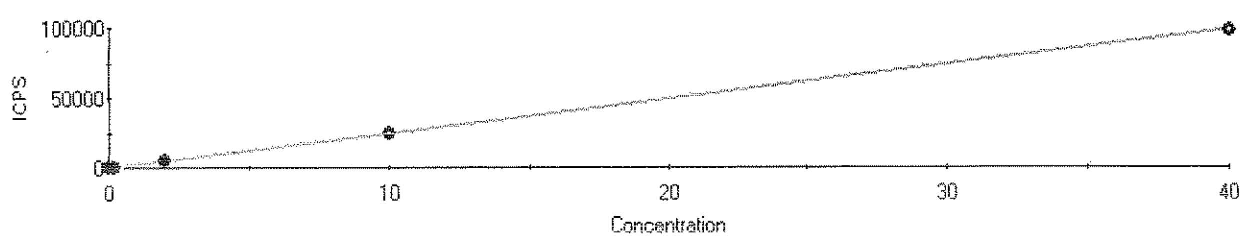
Fully Quant Calibration 208Pb FQ Block 1



Intercept CPS=501.986159 Intercept Conc=0.154670
Sensitivity=3245.520727 Correlation Coeff=0.999985

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.12	-0.12	125.68	
Cal 1	0.50	0.41	-0.09	1,816.84	-0.09
Cal 2	5.00	5.00	0.00	16,731.18	0.00
Cal 3	25.00	25.28	0.28	82,548.22	0.28
Cal 4	100.00	99.93	-0.07	324,828.46	-0.07

Fully Quant Calibration 205Tl FQ Block 1



Intercept CPS=122.212779 Intercept Conc=0.049866
Sensitivity=2450.806367 Correlation Coeff=0.999348

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.01	0.01	150.54	
Cal 1	0.20	0.17	-0.03	543.35	-0.03
Cal 2	2.00	2.01	0.01	5,051.42	0.01

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Cal 3	10.00	10.07	0.07	24,790.04	0.07
Cal 4	40.00	39.47	-0.53	96,852.59	-0.53

ICP-MS INTERNAL STANDARD SUMMARY SHEET

Data File ID: 032414A

Analyte:	9Be	27Al	47Ti	48Ti	51V	52Cr	55Mn	59Co	60Ni	62Ni	63Cu	65Cu
I.S. Used:	45Sc	45Sc	45Sc	45Sc	45Sc	45Sc	71Ga	71Ga	71Ga	71Ga	71Ga	71Ga

Analyte:	66Zn	68Zn	75As	78Se	82Se	86Sr	88Sr	97Mo	98Mo	107Ag	109Ag	111Cd
I.S. Used:	71Ga	71Ga	71Ga	71Ga	71Ga	71Ga	71Ga	115In	115In	115In	115In	115In

Analyte:	114Cd	118Sn	120Sn	121Sb	123Sb	135Ba	137Ba	203Tl	205Tl	208Pb
I.S. Used:	115In	159Tb	159Tb	159Tb	159Tb	159Tb	159Tb	175Lu	175Lu	175Lu

			Internal Standards							
Sample ID	Method	Recovery Limits	6Li Rec	45Sc Rec	71Ga Rec	115In Rec	159Tb Rec	175Lu Rec	209Bi Rec	Anal Date / Time
Cal Blank	N/A	80-120%	99.3%	100.1%	100.1%	99.3%	100.8%	99.3%	100.1%	3/24/2014 16:37
Cal 1	N/A	80-120%	97.9%	97.4%	97.8%	97.1%	96.9%	96.5%	96.3%	3/24/2014 16:43
Cal 2	N/A	80-120%	101.5%	97.7%	100.9%	98.0%	96.4%	96.7%	95.7%	3/24/2014 16:48
Cal 3	N/A	80-120%	104.7%	98.5%	101.2%	99.8%	97.3%	98.6%	96.0%	3/24/2014 16:53
Cal 4	N/A	80-120%	96.2%	94.7%	98.1%	99.2%	94.4%	96.3%	91.7%	3/24/2014 16:58
ICV	N/A	80-120%	102.9%	96.2%	97.8%	95.9%	94.6%	95.5%	92.3%	3/24/2014 17:03
ICB	N/A	80-120%	94.3%	94.5%	92.7%	93.0%	92.0%	91.7%	89.8%	3/24/2014 17:08
MRL	N/A	80-120%	97.6%	95.3%	95.4%	94.4%	92.3%	94.3%	91.6%	3/24/2014 17:13
ICSA	N/A	80-120%	87.0%	86.2%	81.4%	85.0%	83.5%	84.9%	75.7%	3/24/2014 17:18
ICSAB	N/A	80-120%	89.5%	85.8%	84.6%	86.0%	86.9%	85.3%	76.4%	3/24/2014 17:23
CCV-1	N/A	80-120%	100.3%	96.0%	97.0%	97.7%	96.3%	95.3%	93.8%	3/24/2014 17:28
CCB-1	N/A	80-120%	95.6%	94.1%	93.5%	94.0%	92.7%	94.3%	92.0%	3/24/2014 17:33
MB-02134-04	200.8	60-125%	99.4%	95.3%	92.8%	94.7%	93.2%	94.7%	93.1%	3/24/2014 17:38
LCS-02134-03	200.8	60-125%	107.1%	97.5%	99.0%	97.7%	96.7%	97.1%	95.3%	3/24/2014 17:43
J1402003-001	200.8	60-125%	105.2%	94.8%	95.6%	94.4%	93.7%	94.5%	92.9%	3/24/2014 17:48
J1402003-002	200.8	60-125%	100.7%	95.2%	97.6%	96.3%	93.9%	95.1%	92.2%	3/24/2014 17:53
J1402003-003	200.8	60-125%	101.1%	97.4%	98.7%	97.6%	96.2%	97.4%	93.7%	3/24/2014 17:58
J1402003-004	200.8	60-125%	102.7%	94.9%	93.6%	92.9%	92.6%	94.3%	92.9%	3/24/2014 18:03
J1402025-001	6020	30-120%	104.3%	93.2%	93.2%	92.5%	91.7%	95.4%	87.6%	3/24/2014 18:08
J1402025-002	6020	30-120%	98.7%	92.9%	91.7%	92.4%	92.4%	95.2%	88.0%	3/24/2014 18:13
J1402025-003	6020	30-120%	101.1%	93.3%	93.3%	91.8%	92.7%	94.6%	89.0%	3/24/2014 18:18
J1402025-004	6020	30-120%	103.7%	93.2%	91.7%	92.0%	92.2%	93.8%	86.3%	3/24/2014 18:23
CCV-2	N/A	80-120%	102.2%	95.4%	97.3%	96.9%	94.9%	96.3%	93.9%	3/24/2014 18:28
CCB-2	N/A	80-120%	96.5%	92.5%	91.6%	92.9%	92.1%	94.4%	91.7%	3/24/2014 18:33
J1402025-005	6020	30-120%	101.2%	93.6%	91.0%	90.8%	91.4%	93.0%	86.7%	3/24/2014 18:38
J1402025-006	6020	30-120%	99.4%	93.7%	94.5%	93.6%	93.7%	95.1%	89.7%	3/24/2014 18:43
J1402025-007	6020	30-120%	100.9%	94.0%	93.7%	93.0%	93.7%	95.3%	90.3%	3/24/2014 18:48
J1402026-001	6020	30-120%	95.3%	93.0%	90.7%	90.3%	90.8%	92.6%	84.2%	3/24/2014 18:53
J1402026-001S	6020	30-120%	99.7%	95.7%	93.9%	93.2%	93.4%	93.4%	85.5%	3/24/2014 18:58
J1402026-001SD	6020	30-120%	100.6%	94.1%	92.3%	91.7%	90.8%	92.8%	84.7%	3/24/2014 19:03
J1402026-001L	6020	30-120%	98.1%	91.6%	91.9%	89.9%	90.7%	91.7%	87.2%	3/24/2014 19:08
J1402026-001A	6020	30-120%	102.7%	92.2%	88.9%	90.1%	89.6%	91.4%	83.4%	3/24/2014 19:13
J1402026-002	6020	30-120%	90.1%	90.6%	83.4%	83.4%	85.7%	88.1%	73.8%	3/24/2014 19:19
J1402026-003	6020	30-120%	92.6%	91.8%	83.3%	81.3%	84.9%	87.4%	71.9%	3/24/2014 19:24
CCV-3	N/A	80-120%	105.0%	93.5%	94.1%	93.5%	92.4%	93.0%	90.8%	3/24/2014 19:29
CCB-3	N/A	80-120%	96.2%	89.8%	91.0%	90.1%	88.7%	89.3%	89.1%	3/24/2014 19:34
J1402026-004	6020	30-120%	93.4%	88.0%	85.6%	83.1%	85.0%	86.4%	75.9%	3/24/2014 19:39
J1402026-005	6020	30-120%	92.1%	88.7%	79.5%	79.5%	81.5%	82.5%	69.1%	3/24/2014 19:44
J1402026-006	6020	30-120%	89.6%	85.1%	77.3%	77.3%	81.0%	82.8%	69.3%	3/24/2014 19:49
J1402037-001	6020	30-120%	97.0%	88.7%	88.8%	87.0%	86.5%	88.1%	84.7%	3/24/2014 19:54
J1402037-002	6020	30-120%	97.8%	91.0%	88.9%	87.1%	87.4%	90.9%	85.3%	3/24/2014 19:59
J1402037-003	6020	30-120%	100.6%	88.3%	88.2%	86.7%	88.3%	89.8%	85.8%	3/24/2014 20:04
J1401932-001 2x	6020	30-120%	93.5%	86.7%	82.2%	81.1%	83.6%	86.4%	72.9%	3/24/2014 20:09
J1401932-002	6020	30-120%	91.6%	83.0%	74.0%	75.4%	81.0%	83.0%	62.4%	3/24/2014 20:14
J1401932-003 2x	6020	30-120%	91.2%	85.7%	76.0%	78.3%	81.9%	85.0%	66.0%	3/24/2014 20:19
J1401933-001 2x	6020	30-120%	82.6%	80.5%	70.8%	71.4%	76.7%	78.6%	59.1%	3/24/2014 20:24
CCV-4	N/A	80-120%	101.2%	91.8%	92.3%	90.2%	89.8%	90.8%	88.9%	3/24/2014 20:29
CCB-4	N/A	80-120%	93.1%	87.0%	86.9%	85.8%	86.7%	89.2%	86.4%	3/24/2014 20:34

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
Cal Blank	Y	9Be	0.01	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	27Al	0.01	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	47Ti	0.36	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	48Ti	0.27	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	51V	0.25	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	52Cr	0.00	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	55Mn	0.00	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	59Co	0.00	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	60Ni	0.00	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	62Ni	-0.44	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	63Cu	0.00	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	65Cu	-0.01	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	66Zn	-0.05	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	68Zn	-0.05	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	75As	-0.11	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	78Se	-0.01	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	82Se	-0.40	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	86Sr	-0.01	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	88Sr	0.00	1	100.1	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	97Mo	0.00	1	99.3	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	98Mo	0.00	1	99.3	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	107Ag	0.00	1	99.3	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	109Ag	0.00	1	99.3	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	111Cd	0.00	1	99.3	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	114Cd	0.00	1	99.3	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	118Sn	0.36	1	100.8	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	120Sn	0.36	1	100.8	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	121Sb	0.00	1	100.8	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	123Sb	0.00	1	100.8	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	135Ba	-0.03	1	100.8	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	137Ba	0.01	1	100.8	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	203Tl	-0.01	1	99.3	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	205Tl	0.01	1	99.3	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal Blank	Y	208Pb	-0.12	1	99.3	3/24/2014	16:37	ICAL	ICAL	N/A	
Cal 1	Y	9Be	0.41	1	97.4	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	27Al	48.20	1	97.4	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	47Ti	4.86	1	97.4	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	48Ti	4.79	1	97.4	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	51V	1.76	1	97.4	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	52Cr	0.99	1	97.4	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	55Mn	2.06	1	97.8	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	59Co	0.97	1	97.8	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	60Ni	1.95	1	97.8	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	62Ni	2.51	1	97.8	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	63Cu	0.97	1	97.8	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	65Cu	0.94	1	97.8	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	66Zn	5.16	1	97.8	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	68Zn	5.17	1	97.8	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	75As	1.04	1	97.8	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	78Se	2.23	1	97.8	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	82Se	2.06	1	97.8	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	86Sr	2.15	1	97.8	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	88Sr	2.05	1	97.8	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	97Mo	1.96	1	97.1	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	98Mo	1.92	1	97.1	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	107Ag	0.47	1	97.1	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	109Ag	0.44	1	97.1	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	111Cd	0.46	1	97.1	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	114Cd	0.42	1	97.1	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	118Sn	4.39	1	96.9	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	120Sn	4.29	1	96.9	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	121Sb	0.98	1	96.9	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	123Sb	0.93	1	96.9	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	135Ba	2.07	1	96.9	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	137Ba	1.94	1	96.9	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	203Tl	0.14	1	96.5	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	205Tl	0.17	1	96.5	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 1	Y	208Pb	0.41	1	96.5	3/24/2014	16:43	ICAL	ICAL	N/A	
Cal 2	Y	9Be	4.37	1	97.7	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	27Al	500.20	1	97.7	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	47Ti	50.00	1	97.7	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	48Ti	50.02	1	97.7	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	51V	20.06	1	97.7	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	52Cr	9.99	1	97.7	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	55Mn	20.49	1	100.9	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	59Co	10.23	1	100.9	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	60Ni	20.60	1	100.9	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	62Ni	21.01	1	100.9	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	63Cu	10.06	1	100.9	3/24/2014	16:48	ICAL	ICAL	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
Cal 2	Y	**65Cu**	10.01	1	100.9	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	**66Zn**	52.00	1	100.9	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	68Zn	51.25	1	100.9	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	**75As**	9.86	1	100.9	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	**78Se**	19.90	1	100.9	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	82Se	19.79	1	100.9	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	**86Sr**	19.85	1	100.9	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	88Sr	20.45	1	100.9	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	97Mo	20.61	1	98	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	**98Mo**	20.60	1	98	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	107Ag	5.07	1	98	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	**109Ag**	5.04	1	98	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	111Cd	4.02	1	98	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	**114Cd**	4.07	1	98	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	**118Sn**	50.03	1	96.4	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	120Sn	49.82	1	96.4	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	121Sb	9.96	1	96.4	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	**123Sb**	10.03	1	96.4	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	135Ba	20.06	1	96.4	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	**137Ba**	20.21	1	96.4	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	203Tl	2.00	1	96.7	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	**205Tl**	2.01	1	96.7	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 2	Y	**208Pb**	5.00	1	96.7	3/24/2014	16:48	ICAL	ICAL	N/A	
Cal 3	Y	**9Be**	25.17	1	98.5	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**27Al**	2504.00	1	98.5	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**47Ti**	249.40	1	98.5	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	48Ti	250.30	1	98.5	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**51V**	100.20	1	98.5	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**52Cr**	50.37	1	98.5	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**55Mn**	101.00	1	101.2	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**59Co**	50.34	1	101.2	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**60Ni**	101.00	1	101.2	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	62Ni	101.70	1	101.2	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	63Cu	50.43	1	101.2	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**65Cu**	50.42	1	101.2	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**66Zn**	255.30	1	101.2	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	68Zn	251.80	1	101.2	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**75As**	50.72	1	101.2	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**78Se**	100.20	1	101.2	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	82Se	102.80	1	101.2	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**86Sr**	100.20	1	101.2	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	88Sr	100.40	1	101.2	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	97Mo	101.20	1	99.8	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**98Mo**	99.78	1	99.8	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	107Ag	25.26	1	99.8	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**109Ag**	24.67	1	99.8	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	111Cd	20.53	1	99.8	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**114Cd**	20.40	1	99.8	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**118Sn**	249.50	1	97.3	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	120Sn	249.90	1	97.3	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	121Sb	50.13	1	97.3	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**123Sb**	50.09	1	97.3	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	135Ba	99.79	1	97.3	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**137Ba**	100.80	1	97.3	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	203Tl	9.91	1	98.6	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**205Tl**	10.07	1	98.6	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 3	Y	**208Pb**	25.28	1	98.6	3/24/2014	16:53	ICAL	ICAL	N/A	
Cal 4	Y	**9Be**	100.40	1	94.7	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	**27Al**	10030.00	1	94.7	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	**47Ti**	1011.00	1	94.7	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	48Ti	996.50	1	94.7	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	**51V**	395.60	1	94.7	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	**52Cr**	199.40	1	94.7	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	**55Mn**	398.60	1	98.1	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	**59Co**	199.60	1	98.1	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	**60Ni**	397.90	1	98.1	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	62Ni	394.10	1	98.1	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	63Cu	198.60	1	98.1	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	65Cu	199.10	1	98.1	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	**66Zn**	995.20	1	98.1	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	68Zn	981.80	1	98.1	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	**75As**	199.70	1	98.1	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	**78Se**	397.40	1	98.1	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	82Se	399.90	1	98.1	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	86Sr	400.00	1	98.1	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	88Sr	398.80	1	98.1	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	97Mo	399.90	1	99.2	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	**98Mo**	396.50	1	99.2	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	107Ag	99.02	1	99.2	3/24/2014	16:58	ICAL	ICAL	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
Cal 4	Y	109Ag	96.52	1	99.2	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	111Cd	79.84	1	99.2	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	114Cd	79.96	1	99.2	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	118Sn	1002.00	1	94.4	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	120Sn	1006.00	1	94.4	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	121Sb	199.70	1	94.4	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	123Sb	199.60	1	94.4	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	135Ba	397.50	1	94.4	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	137Ba	400.00	1	94.4	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	203Tl	39.35	1	96.3	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	205Tl	39.47	1	96.3	3/24/2014	16:58	ICAL	ICAL	N/A	
Cal 4	Y	208Pb	99.93	1	96.3	3/24/2014	16:58	ICAL	ICAL	N/A	
ICV	Y	9Be	19.63	1	96.2	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	27Al	526.40	1	96.2	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	47Ti	255.30	1	96.2	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	48Ti	253.00	1	96.2	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	51V	100.10	1	96.2	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	52Cr	50.83	1	96.2	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	55Mn	50.86	1	97.8	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	59Co	50.87	1	97.8	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	60Ni	50.97	1	97.8	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	62Ni	51.63	1	97.8	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	63Cu	50.90	1	97.8	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	65Cu	50.91	1	97.8	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	66Zn	103.30	1	97.8	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	68Zn	103.30	1	97.8	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	75As	48.12	1	97.8	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	78Se	50.78	1	97.8	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	82Se	51.14	1	97.8	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	86Sr	49.61	1	97.8	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	88Sr	50.94	1	97.8	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	97Mo	51.14	1	95.9	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	98Mo	51.39	1	95.9	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	107Ag	50.25	1	95.9	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	109Ag	48.71	1	95.9	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	111Cd	25.19	1	95.9	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	114Cd	25.70	1	95.9	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	118Sn	206.80	1	94.6	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	120Sn	205.60	1	94.6	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	121Sb	50.84	1	94.6	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	123Sb	50.53	1	94.6	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	135Ba	49.34	1	94.6	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	137Ba	49.98	1	94.6	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	203Tl	48.65	1	95.5	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	205Tl	49.17	1	95.5	3/24/2014	17:03	ICV	ICV	N/A	
ICV	Y	208Pb	50.37	1	95.5	3/24/2014	17:03	ICV	ICV	N/A	
ICB	Y	9Be	-0.09	1	94.5	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	27Al	-1.12	1	94.5	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	47Ti	-0.01	1	94.5	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	48Ti	-0.06	1	94.5	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	51V	0.16	1	94.5	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	52Cr	0.05	1	94.5	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	55Mn	-0.01	1	92.7	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	59Co	0.00	1	92.7	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	60Ni	0.01	1	92.7	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	62Ni	2.03	1	92.7	3/24/2014	17:08	CCB	CCB	N/A	CCB FH,
ICB	Y	63Cu	0.07	1	92.7	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	65Cu	-0.09	1	92.7	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	66Zn	-0.01	1	92.7	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	68Zn	-0.07	1	92.7	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	75As	0.11	1	92.7	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	78Se	0.27	1	92.7	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	82Se	-0.65	1	92.7	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	86Sr	-0.10	1	92.7	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	88Sr	0.01	1	92.7	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	97Mo	0.23	1	93	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	98Mo	0.26	1	93	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	107Ag	-0.01	1	93	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	109Ag	0.00	1	93	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	111Cd	-0.02	1	93	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	114Cd	0.00	1	93	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	118Sn	0.29	1	92	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	120Sn	0.18	1	92	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	121Sb	0.43	1	92	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	123Sb	0.30	1	92	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	135Ba	-0.04	1	92	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	137Ba	0.02	1	92	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	203Tl	-0.05	1	91.7	3/24/2014	17:08	CCB	CCB	N/A	
ICB	Y	205Tl	-0.02	1	91.7	3/24/2014	17:08	CCB	CCB	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
ICB	Y	208Pb	-0.13	1	91.7	3/24/2014	17:08	CCB	CCB	N/A	
MRL	Y	9Be	0.44	1	95.3	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	27Al	47.08	1	95.3	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	47Ti	4.99	1	95.3	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	48Ti	4.82	1	95.3	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	51V	2.11	1	95.3	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	52Cr	0.99	1	95.3	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	55Mn	2.02	1	95.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	59Co	0.98	1	95.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	60Ni	1.98	1	95.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	N	62Ni	3.41	1	95.4	3/24/2014	17:13	MRL	MRL	N/A	MRL FH, CCB FH,
MRL	Y	63Cu	0.98	1	95.4	3/24/2014	17:13	MRL	MRL	N/A	CCB FH,
MRL	Y	65Cu	0.89	1	95.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	66Zn	5.28	1	95.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	68Zn	5.08	1	95.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	75As	0.66	1	95.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	N	78Se	2.32	1	95.4	3/24/2014	17:13	MRL	MRL	N/A	CCB FH,
MRL	Y	82Se	1.73	1	95.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	86Sr	2.06	1	95.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	88Sr	2.05	1	95.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	97Mo	2.14	1	94.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	98Mo	1.93	1	94.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	107Ag	0.47	1	94.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	109Ag	0.46	1	94.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	111Cd	0.40	1	94.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	114Cd	0.39	1	94.4	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	118Sn	4.24	1	92.3	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	120Sn	4.30	1	92.3	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	121Sb	1.13	1	92.3	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	123Sb	1.07	1	92.3	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	135Ba	2.00	1	92.3	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	137Ba	1.95	1	92.3	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	203Tl	0.12	1	94.3	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	205Tl	0.17	1	94.3	3/24/2014	17:13	MRL	MRL	N/A	
MRL	Y	208Pb	0.37	1	94.3	3/24/2014	17:13	MRL	MRL	N/A	
ICSA	Y	9Be	-0.07	1	86.2	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	27Al	54790.00	1	86.2	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	47Ti	1139.00	1	86.2	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	48Ti	1107.00	1	86.2	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	51V	-0.17	1	86.2	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	52Cr	0.95	1	86.2	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	55Mn	0.33	1	81.4	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	59Co	0.06	1	81.4	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	60Ni	0.57	1	81.4	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	N	62Ni	12.36	1	81.4	3/24/2014	17:18	ICS-A	ICS-A	N/A	ICS-A FH, CCB FH,
ICSA	N	63Cu	1.25	1	81.4	3/24/2014	17:18	ICS-A	ICS-A	N/A	CCB FH,
ICSA	Y	65Cu	0.61	1	81.4	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	66Zn	1.39	1	81.4	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	68Zn	0.81	1	81.4	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	75As	0.74	1	81.4	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	78Se	0.95	1	81.4	3/24/2014	17:18	ICS-A	ICS-A	N/A	CCB FH,
ICSA	Y	82Se	-1.70	1	81.4	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	86Sr	0.21	1	81.4	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	88Sr	0.44	1	81.4	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	97Mo	1090.00	1	85	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	98Mo	1111.00	1	85	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	107Ag	0.02	1	85	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	109Ag	0.04	1	85	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	111Cd	-0.09	1	85	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	114Cd	0.14	1	85	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	118Sn	-0.84	1	83.5	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	120Sn	-1.01	1	83.5	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	121Sb	0.08	1	83.5	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	123Sb	0.05	1	83.5	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	135Ba	0.00	1	83.5	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	137Ba	0.04	1	83.5	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	203Tl	-0.06	1	84.9	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	205Tl	-0.04	1	84.9	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSA	Y	208Pb	-0.02	1	84.9	3/24/2014	17:18	ICS-A	ICS-A	N/A	
ICSAB	Y	9Be	10.24	1	85.8	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	27Al	53980.00	1	85.8	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	47Ti	1219.00	1	85.8	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	48Ti	1186.00	1	85.8	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	51V	40.74	1	85.8	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	52Cr	21.79	1	85.8	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	55Mn	41.58	1	84.6	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	59Co	20.52	1	84.6	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	60Ni	41.11	1	84.6	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	N	62Ni	52.39	1	84.6	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	ICS-AB FH, CCB FH,

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
ICSAB	N	63Cu	20.86	1	84.6	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	CCB FH,
ICSAB	Y	65Cu	20.14	1	84.6	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	66Zn	99.77	1	84.6	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	68Zn	98.06	1	84.6	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	75As	20.89	1	84.6	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	N	78Se	41.78	1	84.6	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	CCB FH,
ICSAB	Y	82Se	39.25	1	84.6	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	86Sr	43.50	1	84.6	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	88Sr	44.42	1	84.6	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	97Mo	1119.00	1	86	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	98Mo	1109.00	1	86	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	107Ag	9.66	1	86	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	109Ag	9.45	1	86	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	111Cd	7.89	1	86	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	114Cd	8.16	1	86	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	118Sn	103.90	1	86.9	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	120Sn	104.90	1	86.9	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	121Sb	20.57	1	86.9	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	123Sb	20.70	1	86.9	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	135Ba	41.79	1	86.9	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	137Ba	42.30	1	86.9	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	203Tl	4.13	1	85.3	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	205Tl	4.01	1	85.3	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
ICSAB	Y	208Pb	10.12	1	85.3	3/24/2014	17:23	ICS-AB	ICS-AB	N/A	
CCV-1	Y	9Be	24.04	1	96	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	27Al	2499.00	1	96	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	47Ti	251.80	1	96	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	48Ti	248.60	1	96	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	51V	99.98	1	96	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	52Cr	50.07	1	96	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	55Mn	100.60	1	97	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	59Co	50.08	1	97	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	60Ni	101.10	1	97	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	N	62Ni	124.30	1	97	3/24/2014	17:28	CCV	CCV	N/A	ICS-A FH, ICS-AB FH, CCV FH 200.8 , CCV FH 6020 W , CCV FH 6020 S ,
CCV-1	Y	63Cu	51.47	1	97	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	65Cu	50.02	1	97	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	66Zn	256.40	1	97	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	68Zn	250.90	1	97	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	75As	50.68	1	97	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	78Se	104.30	1	97	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	82Se	101.00	1	97	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	86Sr	101.00	1	97	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	88Sr	101.40	1	97	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	97Mo	102.60	1	97.7	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	98Mo	101.20	1	97.7	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	107Ag	25.37	1	97.7	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	109Ag	24.68	1	97.7	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	111Cd	20.76	1	97.7	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	114Cd	20.59	1	97.7	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	118Sn	249.60	1	96.3	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	120Sn	252.80	1	96.3	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	121Sb	50.17	1	96.3	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	123Sb	50.10	1	96.3	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	135Ba	98.85	1	96.3	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	137Ba	100.70	1	96.3	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	203Tl	10.03	1	95.3	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	205Tl	9.98	1	95.3	3/24/2014	17:28	CCV	CCV	N/A	
CCV-1	Y	208Pb	25.40	1	95.3	3/24/2014	17:28	CCV	CCV	N/A	
CCB-1	Y	9Be	-0.09	1	94.1	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	27Al	-1.07	1	94.1	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	47Ti	0.03	1	94.1	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	48Ti	-0.31	1	94.1	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	51V	-0.10	1	94.1	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	52Cr	-0.04	1	94.1	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	55Mn	-0.01	1	93.5	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	59Co	-0.01	1	93.5	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	60Ni	0.00	1	93.5	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	N	62Ni	39.75	1	93.5	3/24/2014	17:33	CCB	CCB	N/A	ICS-A FH, ICS-AB FH, CCB FH,
CCB-1	Y	63Cu	2.35	1	93.5	3/24/2014	17:33	CCB	CCB	N/A	CCB FH,
CCB-1	Y	65Cu	-0.10	1	93.5	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	66Zn	-0.07	1	93.5	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	68Zn	-0.04	1	93.5	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	75As	0.07	1	93.5	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	78Se	2.16	1	93.5	3/24/2014	17:33	CCB	CCB	N/A	CCB FH,
CCB-1	Y	82Se	-0.73	1	93.5	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	86Sr	-0.05	1	93.5	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	88Sr	0.00	1	93.5	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	97Mo	0.57	1	94	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	98Mo	0.55	1	94	3/24/2014	17:33	CCB	CCB	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
CCB-1	Y	107Ag	-0.03	1	94	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	**109Ag**	-0.02	1	94	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	111Cd	-0.01	1	94	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	**114Cd**	0.03	1	94	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	**118Sn**	-0.58	1	92.7	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	120Sn	-0.67	1	92.7	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	121Sb	0.11	1	92.7	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	**123Sb**	0.04	1	92.7	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	135Ba	-0.02	1	92.7	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	**137Ba**	-0.01	1	92.7	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	203Tl	-0.05	1	94.3	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	**205Tl**	-0.02	1	94.3	3/24/2014	17:33	CCB	CCB	N/A	
CCB-1	Y	**208Pb**	-0.14	1	94.3	3/24/2014	17:33	CCB	CCB	N/A	
MB-02134-04	Y	**9Be**	-0.09	1	95.3	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**27Al**	0.72	1	95.3	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**47Ti**	0.01	1	95.3	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	N	48Ti	-0.27	1	95.3	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**51V**	0.21	1	95.3	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**52Cr**	0.00	1	95.3	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**55Mn**	0.03	1	92.8	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**59Co**	-0.01	1	92.8	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**60Ni**	-0.01	1	92.8	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	N	62Ni	40.33	1	92.8	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, CCB FH, CCV FH,
MB-02134-04	N	63Cu	2.51	1	92.8	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	MB FH, CCB FH,
MB-02134-04	Y	**65Cu**	-0.12	1	92.8	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**66Zn**	2.85	1	92.8	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	N	68Zn	2.67	1	92.8	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**75As**	0.36	1	92.8	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	N	**78Se**	1.84	1	92.8	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	CCB FH,
MB-02134-04	Y	82Se	-0.93	1	92.8	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**86Sr**	-0.07	1	92.8	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	N	88Sr	0.01	1	92.8	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	N	97Mo	0.21	1	94.7	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**98Mo**	0.21	1	94.7	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	N	107Ag	-0.04	1	94.7	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**109Ag**	-0.03	1	94.7	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	N	111Cd	-0.01	1	94.7	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**114Cd**	0.01	1	94.7	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**118Sn**	-1.04	1	93.2	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	N	120Sn	-1.21	1	93.2	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	N	121Sb	0.00	1	93.2	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**123Sb**	-0.03	1	93.2	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	N	135Ba	-0.04	1	93.2	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**137Ba**	-0.02	1	93.2	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	N	203Tl	-0.07	1	94.7	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**205Tl**	-0.04	1	94.7	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
MB-02134-04	Y	**208Pb**	-0.14	1	94.7	3/24/2014	17:38	MBLK	JQ1402134-04	200.8 W	
LCS-02134-03	Y	**9Be**	26.48	1	97.5	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**27Al**	2642.00	1	97.5	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**47Ti**	262.40	1	97.5	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	N	48Ti	260.20	1	97.5	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**51V**	103.40	1	97.5	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**52Cr**	52.01	1	97.5	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**55Mn**	104.90	1	99	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**59Co**	52.39	1	99	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**60Ni**	105.50	1	99	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	N	62Ni	144.80	1	99	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	ICS-A FH, ICS-AB FH, LCS FH 200.8 , LCS FH 6020 W , LCS FH 6020 S , CCB FH, CCV FH,
LCS-02134-03	N	63Cu	55.12	1	99	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	CCB FH,
LCS-02134-03	Y	**65Cu**	52.67	1	99	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**66Zn**	264.90	1	99	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	N	68Zn	258.80	1	99	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**75As**	52.04	1	99	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	N	**78Se**	105.10	1	99	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	CCB FH,
LCS-02134-03	Y	82Se	103.30	1	99	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**86Sr**	105.50	1	99	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	N	88Sr	105.60	1	99	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	N	97Mo	105.40	1	97.7	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**98Mo**	104.50	1	97.7	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	N	107Ag	26.23	1	97.7	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**109Ag**	25.45	1	97.7	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	N	111Cd	21.18	1	97.7	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**114Cd**	21.20	1	97.7	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**118Sn**	262.50	1	96.7	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	N	120Sn	262.80	1	96.7	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	N	121Sb	52.63	1	96.7	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**123Sb**	51.66	1	96.7	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	N	135Ba	104.40	1	96.7	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	**137Ba**	104.40	1	96.7	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
LCS-02134-03	N	203Tl	10.20	1	97.1	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	205Tl	10.34	1	97.1	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
LCS-02134-03	Y	208Pb	26.55	1	97.1	3/24/2014	17:43	LCS	JQ1402134-03	200.8 W	
J1402003-001	Y	9Be	-0.06	1	94.8	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	27Al	138.70	1	94.8	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	47Ti	1.60	1	94.8	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	N	48Ti	2.43	1	94.8	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	51V	0.49	1	94.8	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	52Cr	0.53	1	94.8	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	55Mn	52.37	1	95.6	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	59Co	0.83	1	95.6	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	60Ni	0.37	1	95.6	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	N	62Ni	37.73	1	95.6	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, LCS FH, CCB FH, CCV FH,
J1402003-001	N	63Cu	2.61	1	95.6	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	MB FH, CCB FH,
J1402003-001	Y	65Cu	0.17	1	95.6	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	66Zn	5.96	1	95.6	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	N	68Zn	6.64	1	95.6	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	75As	0.59	1	95.6	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	N	78Se	2.20	1	95.6	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	CCB FH,
J1402003-001	N	82Se	-0.09	1	95.6	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	86Sr	11.50	1	95.6	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	N	88Sr	11.19	1	95.6	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	N	97Mo	0.29	1	94.4	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	98Mo	0.29	1	94.4	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	N	107Ag	-0.04	1	94.4	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	109Ag	-0.04	1	94.4	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	N	111Cd	0.00	1	94.4	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	114Cd	0.01	1	94.4	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	118Sn	-0.50	1	93.7	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	N	120Sn	-0.74	1	93.7	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	N	121Sb	0.01	1	93.7	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	123Sb	-0.03	1	93.7	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	N	135Ba	16.92	1	93.7	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	137Ba	17.14	1	93.7	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	N	203Tl	0.00	1	94.5	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	205Tl	0.03	1	94.5	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-001	Y	208Pb	-0.10	1	94.5	3/24/2014	17:48	SAMP	J1402003-001	200.8 W	
J1402003-002	Y	9Be	-0.06	1	95.2	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	27Al	390.00	1	95.2	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	47Ti	3.42	1	95.2	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	N	48Ti	3.47	1	95.2	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	51V	0.54	1	95.2	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	52Cr	0.44	1	95.2	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	55Mn	67.50	1	97.6	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	59Co	0.75	1	97.6	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	60Ni	0.34	1	97.6	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	N	62Ni	35.73	1	97.6	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, LCS FH, CCB FH, CCV FH,
J1402003-002	N	63Cu	2.68	1	97.6	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	MB FH, CCB FH,
J1402003-002	Y	65Cu	0.44	1	97.6	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	66Zn	5.08	1	97.6	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	N	68Zn	5.69	1	97.6	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	75As	0.56	1	97.6	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	N	78Se	2.14	1	97.6	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	CCB FH,
J1402003-002	N	82Se	-0.07	1	97.6	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	86Sr	10.24	1	97.6	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	N	88Sr	10.20	1	97.6	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	N	97Mo	0.12	1	96.3	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	98Mo	0.12	1	96.3	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	N	107Ag	-0.04	1	96.3	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	109Ag	-0.03	1	96.3	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	N	111Cd	0.01	1	96.3	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	114Cd	0.02	1	96.3	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	118Sn	-1.15	1	93.9	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	N	120Sn	-1.27	1	93.9	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	N	121Sb	0.00	1	93.9	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	123Sb	-0.06	1	93.9	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	N	135Ba	17.33	1	93.9	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	137Ba	18.50	1	93.9	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	N	203Tl	-0.05	1	95.1	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	205Tl	-0.02	1	95.1	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-002	Y	208Pb	-0.04	1	95.1	3/24/2014	17:53	SAMP	J1402003-002	200.8 W	
J1402003-003	Y	9Be	-0.06	1	97.4	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	27Al	2255.00	1	97.4	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	47Ti	27.13	1	97.4	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	N	48Ti	23.39	1	97.4	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	51V	3.31	1	97.4	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	52Cr	2.05	1	97.4	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	55Mn	10.40	1	98.7	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402003-003	Y	59Co	1.25	1	98.7	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	60Ni	0.77	1	98.7	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	N	62Ni	33.32	1	98.7	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, LCS FH, CCB FH, CCV FH,
J1402003-003	N	63Cu	3.13	1	98.7	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	MB FH, CCB FH,
J1402003-003	Y	65Cu	0.98	1	98.7	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	66Zn	9.36	1	98.7	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	N	68Zn	9.36	1	98.7	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	75As	0.75	1	98.7	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	N	78Se	1.95	1	98.7	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	CCB FH,
J1402003-003	N	82Se	-0.48	1	98.7	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	86Sr	4.20	1	98.7	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	N	88Sr	4.15	1	98.7	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	N	97Mo	0.20	1	97.6	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	98Mo	0.15	1	97.6	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	N	107Ag	-0.05	1	97.6	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	109Ag	-0.04	1	97.6	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	N	111Cd	-0.02	1	97.6	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	114Cd	0.01	1	97.6	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	118Sn	-1.24	1	96.2	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	N	120Sn	-1.39	1	96.2	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	N	121Sb	-0.03	1	96.2	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	123Sb	-0.06	1	96.2	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	N	135Ba	9.67	1	96.2	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	137Ba	10.07	1	96.2	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	N	203Tl	-0.04	1	97.4	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	205Tl	-0.01	1	97.4	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-003	Y	208Pb	0.90	1	97.4	3/24/2014	17:58	SAMP	J1402003-003	200.8 W	
J1402003-004	Y	9Be	-0.06	1	94.9	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	27Al	167.30	1	94.9	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	47Ti	0.26	1	94.9	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	N	48Ti	0.21	1	94.9	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	51V	0.24	1	94.9	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	52Cr	0.13	1	94.9	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	55Mn	8.40	1	93.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	59Co	0.73	1	93.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	60Ni	0.30	1	93.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	N	62Ni	32.21	1	93.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, LCS FH, CCB FH, CCV FH,
J1402003-004	N	63Cu	2.30	1	93.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	MB FH, CCB FH,
J1402003-004	Y	65Cu	0.22	1	93.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	66Zn	5.42	1	93.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	N	68Zn	5.49	1	93.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	75As	0.34	1	93.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	N	78Se	2.12	1	93.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	CCB FH,
J1402003-004	N	82Se	-0.40	1	93.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	86Sr	4.43	1	93.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	N	88Sr	4.45	1	93.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	N	97Mo	0.05	1	92.9	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	98Mo	0.00	1	92.9	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	N	107Ag	-0.05	1	92.9	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	109Ag	-0.04	1	92.9	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	N	111Cd	-0.01	1	92.9	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	114Cd	0.01	1	92.9	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	118Sn	-1.42	1	92.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	N	120Sn	-1.56	1	92.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	N	121Sb	-0.05	1	92.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	123Sb	-0.09	1	92.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	N	135Ba	8.06	1	92.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	137Ba	9.20	1	92.6	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	N	203Tl	-0.06	1	94.3	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	205Tl	-0.04	1	94.3	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402003-004	Y	208Pb	-0.11	1	94.3	3/24/2014	18:03	SAMP	J1402003-004	200.8 W	
J1402025-001	Y	9Be	-0.09	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	27Al	63.66	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	47Ti	1.87	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	N	48Ti	35.00	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	51V	3.90	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	52Cr	-0.05	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	55Mn	0.49	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	59Co	0.08	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	60Ni	0.73	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	N	62Ni	31.38	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, LCS FH, CCB FH, CCV FH,
J1402025-001	N	63Cu	2.29	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	MB FH, CCB FH,
J1402025-001	Y	65Cu	0.29	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	66Zn	3.04	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	N	68Zn	3.66	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	75As	1.24	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	N	78Se	3.43	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	CCB FH,
J1402025-001	Y	82Se	1.02	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402025-001	Y	**86Sr**	140.90	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	N	88Sr	141.20	1	93.2	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	N	97Mo	2.74	1	92.5	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	**98Mo**	2.75	1	92.5	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	N	107Ag	-0.05	1	92.5	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	**109Ag**	-0.05	1	92.5	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	N	111Cd	0.04	1	92.5	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	**114Cd**	0.07	1	92.5	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	**118Sn**	-1.44	1	91.7	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	N	120Sn	-1.61	1	91.7	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	N	121Sb	1.41	1	91.7	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	**123Sb**	1.21	1	91.7	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	N	135Ba	18.09	1	91.7	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	**137Ba**	18.13	1	91.7	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	N	203Tl	-0.07	1	95.4	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	**205Tl**	-0.03	1	95.4	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-001	Y	**208Pb**	-0.06	1	95.4	3/24/2014	18:08	SAMP	J1402025-001	6020 W	
J1402025-002	Y	**9Be**	-0.09	1	92.9	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**27Al**	46.38	1	92.9	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**47Ti**	0.92	1	92.9	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	N	48Ti	20.39	1	92.9	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**51V**	0.00	1	92.9	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**52Cr**	0.07	1	92.9	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**55Mn**	27.09	1	91.7	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**59Co**	0.04	1	91.7	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**60Ni**	0.40	1	91.7	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	N	62Ni	28.91	1	91.7	3/24/2014	18:13	SAMP	J1402025-002	6020 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, LCS FH, CCB FH, CCV FH,
J1402025-002	N	63Cu	1.94	1	91.7	3/24/2014	18:13	SAMP	J1402025-002	6020 W	MB FH, CCB FH,
J1402025-002	Y	**65Cu**	0.08	1	91.7	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**66Zn**	3.28	1	91.7	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	N	68Zn	3.37	1	91.7	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**75As**	0.78	1	91.7	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	N	**78Se**	2.64	1	91.7	3/24/2014	18:13	SAMP	J1402025-002	6020 W	CCB FH,
J1402025-002	YY	82Se	-0.32	1	91.7	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**86Sr**	51.25	1	91.7	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	N	88Sr	51.62	1	91.7	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	N	97Mo	2.26	1	92.4	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**98Mo**	2.26	1	92.4	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	N	107Ag	-0.05	1	92.4	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**109Ag**	-0.05	1	92.4	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	N	111Cd	-0.01	1	92.4	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**114Cd**	0.03	1	92.4	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**118Sn**	-1.47	1	92.4	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	N	120Sn	-1.60	1	92.4	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	N	121Sb	-0.03	1	92.4	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**123Sb**	-0.05	1	92.4	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	N	135Ba	11.32	1	92.4	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**137Ba**	11.65	1	92.4	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	N	203Tl	-0.07	1	95.2	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**205Tl**	-0.04	1	95.2	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-002	Y	**208Pb**	-0.09	1	95.2	3/24/2014	18:13	SAMP	J1402025-002	6020 W	
J1402025-003	Y	**9Be**	-0.09	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	**27Al**	33.97	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	**47Ti**	1.10	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	N	48Ti	15.61	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	**51V**	0.25	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	**52Cr**	0.05	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	**55Mn**	25.70	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	**59Co**	0.03	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	**60Ni**	0.38	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	N	62Ni	25.00	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, LCS FH, CCB FH, CCV FH,
J1402025-003	N	63Cu	1.62	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	MB FH, CCB FH,
J1402025-003	Y	**65Cu**	0.12	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	**66Zn**	4.62	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	N	68Zn	4.72	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	**75As**	2.68	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	N	**78Se**	2.06	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	CCB FH,
J1402025-003	Y	82Se	-0.58	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	**86Sr**	33.38	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	N	88Sr	33.95	1	93.3	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	N	97Mo	5.43	1	91.8	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	**98Mo**	5.66	1	91.8	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	N	107Ag	-0.06	1	91.8	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	**109Ag**	-0.05	1	91.8	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	N	111Cd	0.10	1	91.8	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	**114Cd**	0.09	1	91.8	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	**118Sn**	-1.41	1	92.7	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	N	120Sn	-1.61	1	92.7	3/24/2014	18:18	SAMP	J1402025-003	6020 W	

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SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402025-003	N	121Sb	-0.06	1	92.7	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	123Sb	-0.06	1	92.7	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	N	135Ba	2.45	1	92.7	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	137Ba	2.48	1	92.7	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	N	203Tl	-0.07	1	94.6	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	205Tl	-0.03	1	94.6	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-003	Y	208Pb	-0.05	1	94.6	3/24/2014	18:18	SAMP	J1402025-003	6020 W	
J1402025-004	Y	9Be	-0.09	1	93.2	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	27Al	10.66	1	93.2	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	47Ti	0.18	1	93.2	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	N	48Ti	15.82	1	93.2	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	51V	1.62	1	93.2	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	52Cr	0.30	1	93.2	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	55Mn	63.39	1	91.7	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	59Co	0.08	1	91.7	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	60Ni	0.41	1	91.7	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	N	62Ni	18.64	1	91.7	3/24/2014	18:23	SAMP	J1402025-004	6020 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, LCS FH, CCB FH, CCV FH,
J1402025-004	N	63Cu	1.64	1	91.7	3/24/2014	18:23	SAMP	J1402025-004	6020 W	MB FH, CCB FH,
J1402025-004	Y	65Cu	0.50	1	91.7	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	66Zn	4.90	1	91.7	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	N	68Zn	5.37	1	91.7	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	75As	4.00	1	91.7	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	N	78Se	2.00	1	91.7	3/24/2014	18:23	SAMP	J1402025-004	6020 W	CCB FH,
J1402025-004	Y	82Se	0.59	1	91.7	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	86Sr	202.30	1	91.7	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	N	88Sr	203.40	1	91.7	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	N	97Mo	0.08	1	92	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	98Mo	0.08	1	92	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	N	107Ag	-0.06	1	92	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	109Ag	-0.05	1	92	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	N	111Cd	0.02	1	92	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	114Cd	0.05	1	92	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	118Sn	-1.52	1	92.2	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	N	120Sn	-1.61	1	92.2	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	N	121Sb	-0.02	1	92.2	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	123Sb	-0.06	1	92.2	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	N	135Ba	11.64	1	92.2	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	137Ba	11.72	1	92.2	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	N	203Tl	-0.07	1	93.8	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	205Tl	-0.04	1	93.8	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
J1402025-004	Y	208Pb	-0.09	1	93.8	3/24/2014	18:23	SAMP	J1402025-004	6020 W	
CCV-2	Y	9Be	23.62	1	95.4	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	27Al	2540.00	1	95.4	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	47Ti	253.10	1	95.4	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	48Ti	250.00	1	95.4	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	51V	100.30	1	95.4	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	52Cr	49.98	1	95.4	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	55Mn	101.60	1	97.3	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	59Co	50.49	1	97.3	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	60Ni	101.60	1	97.3	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	N	62Ni	126.20	1	97.3	3/24/2014	18:28	CCV	CCV	N/A	ICS-A FH, ICS-AB FH, CCV FH 200.8 , CCV FH 6020 W , CCV FH 6020 S ,
CCV-2	Y	63Cu	52.20	1	97.3	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	65Cu	51.05	1	97.3	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	66Zn	259.30	1	97.3	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	68Zn	256.00	1	97.3	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	75As	51.54	1	97.3	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	78Se	104.90	1	97.3	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	82Se	102.10	1	97.3	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	86Sr	103.00	1	97.3	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	88Sr	102.30	1	97.3	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	97Mo	100.90	1	96.9	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	98Mo	100.20	1	96.9	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	107Ag	24.76	1	96.9	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	109Ag	24.47	1	96.9	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	111Cd	20.57	1	96.9	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	114Cd	20.99	1	96.9	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	118Sn	250.90	1	94.9	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	120Sn	252.30	1	94.9	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	121Sb	50.01	1	94.9	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	123Sb	49.49	1	94.9	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	135Ba	98.96	1	94.9	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	137Ba	100.60	1	94.9	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	203Tl	10.05	1	96.3	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	205Tl	10.03	1	96.3	3/24/2014	18:28	CCV	CCV	N/A	
CCV-2	Y	208Pb	25.61	1	96.3	3/24/2014	18:28	CCV	CCV	N/A	
CCB-2	Y	9Be	-0.08	1	92.5	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	27Al	-1.09	1	92.5	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	47Ti	-0.04	1	92.5	3/24/2014	18:33	CCB	CCB	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
CCB-2	Y	48Ti	-0.05	1	92.5	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**51V**	-0.13	1	92.5	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**52Cr**	-0.15	1	92.5	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**55Mn**	0.00	1	91.6	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**59Co**	0.00	1	91.6	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**60Ni**	-0.02	1	91.6	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	N	62Ni	18.85	1	91.6	3/24/2014	18:33	CCB	CCB	N/A	ICS-A FH, ICS-AB FH, CCB FH,
CCB-2	Y	63Cu	0.99	1	91.6	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**65Cu**	-0.07	1	91.6	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**66Zn**	-0.01	1	91.6	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	68Zn	-0.08	1	91.6	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**75As**	0.28	1	91.6	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**78Se**	1.91	1	91.6	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	82Se	-0.43	1	91.6	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**86Sr**	-0.07	1	91.6	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	88Sr	0.02	1	91.6	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	97Mo	0.20	1	92.9	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**98Mo**	0.20	1	92.9	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	107Ag	-0.04	1	92.9	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**109Ag**	-0.05	1	92.9	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	111Cd	-0.01	1	92.9	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**114Cd**	0.01	1	92.9	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**118Sn**	-0.67	1	92.1	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	120Sn	-0.75	1	92.1	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	121Sb	0.05	1	92.1	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**123Sb**	0.04	1	92.1	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	135Ba	-0.01	1	92.1	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**137Ba**	0.00	1	92.1	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	203Tl	-0.06	1	94.4	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**205Tl**	-0.04	1	94.4	3/24/2014	18:33	CCB	CCB	N/A	
CCB-2	Y	**208Pb**	-0.14	1	94.4	3/24/2014	18:33	CCB	CCB	N/A	
J1402025-005	Y	**9Be**	-0.09	1	93.6	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**27Al**	144.90	1	93.6	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**47Ti**	2.29	1	93.6	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	N	48Ti	21.55	1	93.6	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**51V**	0.16	1	93.6	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**52Cr**	0.32	1	93.6	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**55Mn**	28.24	1	91	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**59Co**	0.07	1	91	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**60Ni**	0.45	1	91	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	N	62Ni	27.74	1	91	3/24/2014	18:38	SAMP	J1402025-005	6020 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, LCS FH, CCB FH, CCV FH,
J1402025-005	N	63Cu	1.81	1	91	3/24/2014	18:38	SAMP	J1402025-005	6020 W	MB FH, CCB FH,
J1402025-005	Y	**65Cu**	0.16	1	91	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**66Zn**	3.82	1	91	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	N	68Zn	4.13	1	91	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**75As**	0.78	1	91	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	N	**78Se**	1.69	1	91	3/24/2014	18:38	SAMP	J1402025-005	6020 W	CCB FH,
J1402025-005	Y	82Se	-0.29	1	91	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**86Sr**	52.76	1	91	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	N	88Sr	52.63	1	91	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	N	97Mo	1.73	1	90.8	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**98Mo**	1.75	1	90.8	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	N	107Ag	-0.05	1	90.8	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**109Ag**	-0.06	1	90.8	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	N	111Cd	0.02	1	90.8	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**114Cd**	0.04	1	90.8	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**118Sn**	-1.17	1	91.4	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	N	120Sn	-1.29	1	91.4	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	N	121Sb	0.06	1	91.4	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**123Sb**	0.02	1	91.4	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	N	135Ba	12.22	1	91.4	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**137Ba**	11.97	1	91.4	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	N	203Tl	-0.07	1	93	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**205Tl**	-0.03	1	93	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-005	Y	**208Pb**	-0.01	1	93	3/24/2014	18:38	SAMP	J1402025-005	6020 W	
J1402025-006	Y	**9Be**	-0.09	1	93.7	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	**27Al**	443.80	1	93.7	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	**47Ti**	0.21	1	93.7	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	N	48Ti	8.03	1	93.7	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	**51V**	0.36	1	93.7	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	**52Cr**	-0.06	1	93.7	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	55Mn	0.65	1	94.5	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	**59Co**	0.02	1	94.5	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	**60Ni**	0.52	1	94.5	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	N	62Ni	35.98	1	94.5	3/24/2014	18:43	SAMP	J1402025-006	6020 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, LCS FH, CCB FH, CCV FH,
J1402025-006	N	63Cu	2.25	1	94.5	3/24/2014	18:43	SAMP	J1402025-006	6020 W	MB FH, CCB FH,
J1402025-006	Y	**65Cu**	0.05	1	94.5	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	**66Zn**	3.60	1	94.5	3/24/2014	18:43	SAMP	J1402025-006	6020 W	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402025-006	N	68Zn	6.43	1	94.5	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	75As	0.69	1	94.5	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	N	78Se	2.16	1	94.5	3/24/2014	18:43	SAMP	J1402025-006	6020 W	CCB FH,
J1402025-006	Y	82Se	-0.32	1	94.5	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	86Sr	318.40	1	94.5	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	N	88Sr	319.20	1	94.5	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	N	97Mo	7.89	1	93.6	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	98Mo	7.48	1	93.6	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	N	107Ag	-0.05	1	93.6	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	109Ag	-0.06	1	93.6	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	N	111Cd	0.01	1	93.6	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	114Cd	0.02	1	93.6	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	118Sn	-1.11	1	93.7	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	N	120Sn	-1.26	1	93.7	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	N	121Sb	0.14	1	93.7	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	123Sb	0.09	1	93.7	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	N	135Ba	53.72	1	93.7	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	137Ba	53.22	1	93.7	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	N	203Tl	-0.06	1	95.1	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	205Tl	-0.03	1	95.1	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-006	Y	208Pb	-0.12	1	95.1	3/24/2014	18:43	SAMP	J1402025-006	6020 W	
J1402025-007	Y	9Be	-0.09	1	94	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	27Al	74.81	1	94	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	47Ti	3.14	1	94	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	N	48Ti	29.74	1	94	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	51V	0.55	1	94	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	52Cr	10.51	1	94	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	55Mn	15.58	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	59Co	0.23	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	60Ni	49.69	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	N	62Ni	87.45	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, LCS FH, CCB FH, CCV FH,
J1402025-007	N	63Cu	4.97	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	MB FH, CCB FH,
J1402025-007	Y	65Cu	2.68	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	66Zn	17.70	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	N	68Zn	19.04	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	75As	0.88	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	N	78Se	2.05	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	CCB FH,
J1402025-007	Y	82Se	-0.21	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	86Sr	273.80	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	N	88Sr	273.20	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	N	97Mo	2.32	1	93	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	98Mo	2.06	1	93	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	N	107Ag	-0.05	1	93	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	109Ag	-0.05	1	93	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	N	111Cd	15.00	1	93	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	114Cd	15.32	1	93	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	118Sn	-0.86	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	N	120Sn	-0.96	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	N	121Sb	0.47	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	123Sb	0.47	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	N	135Ba	31.02	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	137Ba	30.93	1	93.7	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	N	203Tl	-0.05	1	95.3	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	205Tl	-0.03	1	95.3	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402025-007	Y	208Pb	0.07	1	95.3	3/24/2014	18:48	SAMP	J1402025-007	6020 W	
J1402026-001	Y	9Be	-0.08	1	93	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	27Al	56.74	1	93	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	47Ti	1.33	1	93	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	N	48Ti	40.25	1	93	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	51V	1.15	1	93	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	52Cr	0.47	1	93	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	55Mn	258.50	1	90.7	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	59Co	1.25	1	90.7	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	60Ni	4.05	1	90.7	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	N	62Ni	66.39	1	90.7	3/24/2014	18:53	SAMP	J1402026-001	6020 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, LCS FH, CCB FH, CCV FH,
J1402026-001	N	63Cu	4.23	1	90.7	3/24/2014	18:53	SAMP	J1402026-001	6020 W	MB FH, CCB FH,
J1402026-001	Y	65Cu	0.50	1	90.7	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	66Zn	10.91	1	90.7	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	N	68Zn	16.90	1	90.7	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	75As	6.64	1	90.7	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	N	78Se	2.95	1	90.7	3/24/2014	18:53	SAMP	J1402026-001	6020 W	CCB FH,
J1402026-001	Y	82Se	0.09	1	90.7	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	86Sr	192.00	1	90.7	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	N	88Sr	194.40	1	90.7	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	N	97Mo	0.28	1	90.3	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	98Mo	0.26	1	90.3	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	N	107Ag	-0.05	1	90.3	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	109Ag	-0.06	1	90.3	3/24/2014	18:53	SAMP	J1402026-001	6020 W	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402026-001	N	111Cd	0.01	1	90.3	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	**114Cd**	0.02	1	90.3	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	**118Sn**	-1.55	1	90.8	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	N	120Sn	-1.66	1	90.8	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	N	121Sb	0.00	1	90.8	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	**123Sb**	-0.03	1	90.8	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	N	135Ba	125.80	1	90.8	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	**137Ba**	128.70	1	90.8	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	N	203Tl	-0.07	1	92.6	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	**205Tl**	-0.05	1	92.6	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001	Y	**208Pb**	-0.02	1	92.6	3/24/2014	18:53	SAMP	J1402026-001	6020 W	
J1402026-001S	Y	**9Be**	25.60	1	95.7	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**27Al**	2617.00	1	95.7	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**47Ti**	257.60	1	95.7	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	N	48Ti	294.40	1	95.7	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**51V**	98.93	1	95.7	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**52Cr**	52.27	1	95.7	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**55Mn**	356.00	1	93.9	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**59Co**	52.65	1	93.9	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**60Ni**	105.20	1	93.9	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	N	62Ni	156.80	1	93.9	3/24/2014	18:58	MS	JQ1402134-01	6020 W	ICS-A FH, ICS-AB FH, CCB FH, CCV FH,
J1402026-001S	N	63Cu	53.76	1	93.9	3/24/2014	18:58	MS	JQ1402134-01	6020 W	CCB FH,
J1402026-001S	Y	**65Cu**	51.14	1	93.9	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**66Zn**	259.10	1	93.9	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	N	68Zn	261.10	1	93.9	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**75As**	57.55	1	93.9	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	N	**78Se**	101.90	1	93.9	3/24/2014	18:58	MS	JQ1402134-01	6020 W	CCB FH,
J1402026-001S	N	82Se	100.10	1	93.9	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**86Sr**	293.30	1	93.9	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	N	88Sr	294.30	1	93.9	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	N	97Mo	106.90	1	93.2	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**98Mo**	105.20	1	93.2	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	N	107Ag	24.74	1	93.2	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**109Ag**	24.12	1	93.2	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	N	111Cd	20.72	1	93.2	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**114Cd**	19.87	1	93.2	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**118Sn**	255.00	1	93.4	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	N	120Sn	254.10	1	93.4	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	N	121Sb	51.28	1	93.4	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**123Sb**	50.39	1	93.4	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	N	135Ba	226.10	1	93.4	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**137Ba**	231.10	1	93.4	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	N	203Tl	9.81	1	93.4	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**205Tl**	10.08	1	93.4	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001S	Y	**208Pb**	25.10	1	93.4	3/24/2014	18:58	MS	JQ1402134-01	6020 W	
J1402026-001SD	Y	**9Be**	25.74	1	94.1	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**27Al**	2611.00	1	94.1	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**47Ti**	254.70	1	94.1	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	N	48Ti	290.30	1	94.1	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**51V**	99.33	1	94.1	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**52Cr**	52.51	1	94.1	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**55Mn**	353.50	1	92.3	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**59Co**	52.96	1	92.3	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**60Ni**	105.40	1	92.3	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	N	62Ni	147.60	1	92.3	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	ICS-A FH, ICS-AB FH, CCB FH, CCV FH,
J1402026-001SD	N	63Cu	52.79	1	92.3	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	CCB FH,
J1402026-001SD	Y	**65Cu**	50.35	1	92.3	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**66Zn**	256.40	1	92.3	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	N	68Zn	260.80	1	92.3	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**75As**	56.51	1	92.3	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	N	**78Se**	101.40	1	92.3	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	CCB FH,
J1402026-001SD	N	82Se	99.69	1	92.3	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**86Sr**	291.50	1	92.3	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	N	88Sr	293.40	1	92.3	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	N	97Mo	105.50	1	91.7	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**98Mo**	104.80	1	91.7	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	N	107Ag	24.82	1	91.7	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**109Ag**	24.24	1	91.7	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	N	111Cd	20.80	1	91.7	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**114Cd**	20.12	1	91.7	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**118Sn**	255.10	1	90.8	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	N	120Sn	257.20	1	90.8	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	N	121Sb	51.04	1	90.8	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**123Sb**	50.98	1	90.8	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	N	135Ba	225.50	1	90.8	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**137Ba**	230.40	1	90.8	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	N	203Tl	9.54	1	92.8	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**205Tl**	9.94	1	92.8	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	
J1402026-001SD	Y	**208Pb**	24.84	1	92.8	3/24/2014	19:03	MSD	JQ1402134-02	6020 W	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402026-001L	Y	**9Be**	-0.09	5	91.6	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**27Al**	11.21	5	91.6	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**47Ti**	0.40	5	91.6	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	N	48Ti	8.11	5	91.6	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**51V**	0.35	5	91.6	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**52Cr**	-0.19	5	91.6	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**55Mn**	51.84	5	91.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**59Co**	0.22	5	91.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**60Ni**	0.93	5	91.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	N	62Ni	30.58	5	91.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	ICS-A FH, ICS-AB FH, CCB FH, CCV FH,
J1402026-001L	N	63Cu	1.77	5	91.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	CCB FH,
J1402026-001L	Y	**65Cu**	0.12	5	91.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**66Zn**	4.74	5	91.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	N	68Zn	5.87	5	91.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**75As**	1.17	5	91.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	N	**78Se**	1.41	5	91.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	CCB FH,
J1402026-001L	N	82Se	-0.45	5	91.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**86Sr**	37.80	5	91.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	N	88Sr	38.44	5	91.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	N	97Mo	0.33	5	89.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**98Mo**	0.26	5	89.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	N	107Ag	-0.04	5	89.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**109Ag**	-0.04	5	89.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	N	111Cd	-0.01	5	89.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**114Cd**	0.03	5	89.9	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**118Sn**	-0.85	5	90.7	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	N	120Sn	-0.92	5	90.7	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	N	121Sb	-0.02	5	90.7	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**123Sb**	-0.05	5	90.7	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	N	135Ba	25.00	5	90.7	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**137Ba**	25.84	5	90.7	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	N	203Tl	-0.04	5	91.7	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**205Tl**	-0.02	5	91.7	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001L	Y	**208Pb**	-0.11	5	91.7	3/24/2014	19:08	SD	Serial Dilution	6020 W	
J1402026-001A	Y	**9Be**	25.40	1	92.2	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**27Al**	2544.00	1	92.2	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**47Ti**	248.60	1	92.2	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	N	48Ti	285.40	1	92.2	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**51V**	96.52	1	92.2	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**52Cr**	51.11	1	92.2	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**55Mn**	355.20	1	88.9	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**59Co**	51.84	1	88.9	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**60Ni**	104.30	1	88.9	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	N	62Ni	139.90	1	88.9	3/24/2014	19:13	PS	Post Spike	6020 W	ICS-A FH, ICS-AB FH, CCB FH, CCV FH,
J1402026-001A	N	63Cu	51.57	1	88.9	3/24/2014	19:13	PS	Post Spike	6020 W	CCB FH,
J1402026-001A	Y	**65Cu**	49.37	1	88.9	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**66Zn**	255.90	1	88.9	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	N	68Zn	258.40	1	88.9	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**75As**	56.38	1	88.9	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	N	**78Se**	100.00	1	88.9	3/24/2014	19:13	PS	Post Spike	6020 W	CCB FH,
J1402026-001A	N	82Se	100.30	1	88.9	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**86Sr**	292.10	1	88.9	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	N	88Sr	291.80	1	88.9	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	N	97Mo	102.50	1	90.1	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**98Mo**	102.90	1	90.1	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	N	107Ag	23.82	1	90.1	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**109Ag**	23.14	1	90.1	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	N	111Cd	19.45	1	90.1	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**114Cd**	19.55	1	90.1	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**118Sn**	248.60	1	89.6	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	N	120Sn	250.60	1	89.6	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	N	121Sb	49.14	1	89.6	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**123Sb**	49.09	1	89.6	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	N	135Ba	222.60	1	89.6	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**137Ba**	227.00	1	89.6	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	N	203Tl	9.38	1	91.4	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**205Tl**	9.87	1	91.4	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-001A	Y	**208Pb**	24.31	1	91.4	3/24/2014	19:13	PS	Post Spike	6020 W	
J1402026-002	Y	**9Be**	-0.04	1	90.6	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**27Al**	2683.00	1	90.6	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**47Ti**	12.39	1	90.6	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	N	48Ti	32.25	1	90.6	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**51V**	23.43	1	90.6	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**52Cr**	4.81	1	90.6	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**55Mn**	165.50	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**59Co**	1.70	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**60Ni**	7.28	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	N	62Ni	70.63	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, LCS FH, CCB FH, CCV FH,
J1402026-002	N	63Cu	6.62	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	MB FH, CCB FH,

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SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402026-002	Y	**65Cu**	1.38	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**66Zn**	10.32	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	N	68Zn	14.60	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**75As**	8.36	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	N	78Se	4.06	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	CCB FH,
J1402026-002	N	82Se	-0.30	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**86Sr**	126.10	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	N	88Sr	127.80	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	N	97Mo	2.67	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**98Mo**	2.51	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	N	107Ag	-0.06	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**109Ag**	-0.05	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	N	111Cd	0.01	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**114Cd**	-0.04	1	83.4	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**118Sn**	-0.71	1	85.7	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	N	120Sn	-0.78	1	85.7	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	N	121Sb	0.43	1	85.7	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**123Sb**	0.51	1	85.7	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	N	135Ba	86.87	1	85.7	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**137Ba**	88.37	1	85.7	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	N	203Tl	-0.05	1	88.1	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**205Tl**	-0.03	1	88.1	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-002	Y	**208Pb**	2.70	1	88.1	3/24/2014	19:19	SAMP	J1402026-002	6020 W	
J1402026-003	Y	**9Be**	-0.02	1	91.8	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**27Al**	4369.00	1	91.8	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**47Ti**	14.78	1	91.8	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	N	48Ti	31.12	1	91.8	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**51V**	26.65	1	91.8	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**52Cr**	6.48	1	91.8	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**55Mn**	160.20	1	83.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**59Co**	1.73	1	83.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**60Ni**	7.20	1	83.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	N	62Ni	71.40	1	83.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, LCS FH, CCB FH, CCV FH,
J1402026-003	N	63Cu	7.11	1	83.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	MB FH, CCB FH,
J1402026-003	Y	**65Cu**	1.49	1	83.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**66Zn**	12.02	1	83.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	N	68Zn	17.06	1	83.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**75As**	8.58	1	83.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	N	78Se	3.66	1	83.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	CCB FH,
J1402026-003	N	82Se	0.55	1	83.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**86Sr**	123.70	1	83.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	N	88Sr	123.60	1	83.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	N	97Mo	2.29	1	81.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**98Mo**	2.23	1	81.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	N	107Ag	-0.04	1	81.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**109Ag**	-0.06	1	81.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	N	111Cd	0.06	1	81.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**114Cd**	-0.01	1	81.3	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**118Sn**	-1.16	1	84.9	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	N	120Sn	-1.25	1	84.9	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	N	121Sb	0.40	1	84.9	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**123Sb**	0.34	1	84.9	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	N	135Ba	88.95	1	84.9	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**137Ba**	89.96	1	84.9	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	N	203Tl	-0.06	1	87.4	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**205Tl**	-0.03	1	87.4	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
J1402026-003	Y	**208Pb**	4.13	1	87.4	3/24/2014	19:24	SAMP	J1402026-003	6020 W	
CCV-3	Y	**9Be**	25.11	1	93.5	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**27Al**	2590.00	1	93.5	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**47Ti**	254.10	1	93.5	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	48Ti	251.90	1	93.5	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**51V**	100.20	1	93.5	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**52Cr**	50.91	1	93.5	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**55Mn**	102.40	1	94.1	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**59Co**	50.75	1	94.1	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**60Ni**	103.10	1	94.1	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	N	62Ni	155.30	1	94.1	3/24/2014	19:29	CCV	CCV	N/A	ICS-A FH, ICS-AB FH, CCV FH 200.8 , CCV FH 6020 W , CCV FH 6020 S ,
CCV-3	Y	63Cu	54.36	1	94.1	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	65Cu	51.38	1	94.1	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	66Zn	261.60	1	94.1	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	68Zn	258.50	1	94.1	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**75As**	51.55	1	94.1	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**78Se**	105.30	1	94.1	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	82Se	102.10	1	94.1	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**86Sr**	101.10	1	94.1	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	88Sr	102.50	1	94.1	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	97Mo	100.20	1	93.5	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**98Mo**	101.00	1	93.5	3/24/2014	19:29	CCV	CCV	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
CCV-3	Y	107Ag	25.44	1	93.5	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**109Ag**	24.74	1	93.5	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	111Cd	20.67	1	93.5	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**114Cd**	21.17	1	93.5	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**118Sn**	255.30	1	92.4	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	120Sn	256.20	1	92.4	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	121Sb	50.10	1	92.4	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**123Sb**	50.34	1	92.4	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	135Ba	100.20	1	92.4	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**137Ba**	102.20	1	92.4	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	203Tl	10.02	1	93	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**205Tl**	10.13	1	93	3/24/2014	19:29	CCV	CCV	N/A	
CCV-3	Y	**208Pb**	25.54	1	93	3/24/2014	19:29	CCV	CCV	N/A	
CCB-3	Y	**9Be**	-0.08	1	89.8	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**27Al**	-1.04	1	89.8	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**47Ti**	-0.14	1	89.8	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	48Ti	-0.44	1	89.8	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**51V**	0.11	1	89.8	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**52Cr**	-0.17	1	89.8	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**55Mn**	0.01	1	91	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**59Co**	0.01	1	91	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**60Ni**	0.01	1	91	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	N	62Ni	47.79	1	91	3/24/2014	19:34	CCB	CCB	N/A	ICS-A FH, ICS-AB FH, CCB FH,
CCB-3	Y	63Cu	2.64	1	91	3/24/2014	19:34	CCB	CCB	N/A	CCB FH,
CCB-3	Y	**65Cu**	-0.10	1	91	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**66Zn**	-0.05	1	91	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	68Zn	-0.07	1	91	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**75As**	0.30	1	91	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**78Se**	2.17	1	91	3/24/2014	19:34	CCB	CCB	N/A	CCB FH,
CCB-3	Y	82Se	-0.63	1	91	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**86Sr**	-0.01	1	91	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	88Sr	0.02	1	91	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	97Mo	0.23	1	90.1	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**98Mo**	0.20	1	90.1	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	107Ag	-0.05	1	90.1	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**109Ag**	-0.06	1	90.1	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	111Cd	-0.02	1	90.1	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**114Cd**	0.01	1	90.1	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**118Sn**	-0.65	1	88.7	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	120Sn	-0.76	1	88.7	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	121Sb	0.06	1	88.7	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**123Sb**	0.03	1	88.7	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	135Ba	0.00	1	88.7	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**137Ba**	0.04	1	88.7	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	203Tl	-0.07	1	89.3	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**205Tl**	-0.04	1	89.3	3/24/2014	19:34	CCB	CCB	N/A	
CCB-3	Y	**208Pb**	-0.14	1	89.3	3/24/2014	19:34	CCB	CCB	N/A	
J1402026-004	Y	**9Be**	0.03	1	88	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**27Al**	1196.00	1	88	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**47Ti**	5.86	1	88	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	N	48Ti	78.39	1	88	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**51V**	20.53	1	88	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**52Cr**	3.93	1	88	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**55Mn**	439.90	1	85.6	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**59Co**	7.05	1	85.6	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**60Ni**	12.80	1	85.6	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	N	62Ni	64.51	1	85.6	3/24/2014	19:39	SAMP	J1402026-004	6020 W	ICS-A FH, ICS-AB FH, MRL FH, MB FH, LCS FH, CCB FH, CCV FH,
J1402026-004	N	63Cu	6.38	1	85.6	3/24/2014	19:39	SAMP	J1402026-004	6020 W	MB FH, CCB FH,
J1402026-004	Y	**65Cu**	2.88	1	85.6	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**66Zn**	228.30	1	85.6	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	N	68Zn	231.30	1	85.6	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**75As**	20.60	1	85.6	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	N	**78Se**	2.96	1	85.6	3/24/2014	19:39	SAMP	J1402026-004	6020 W	CCB FH,
J1402026-004	N	82Se	-0.24	1	85.6	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**86Sr**	380.00	1	85.6	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	N	88Sr	383.30	1	85.6	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	N	97Mo	1.59	1	83.1	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**98Mo**	1.51	1	83.1	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	N	107Ag	-0.05	1	83.1	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**109Ag**	-0.05	1	83.1	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	N	111Cd	0.08	1	83.1	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**114Cd**	0.03	1	83.1	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**118Sn**	-0.88	1	85	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	N	120Sn	-1.04	1	85	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	N	121Sb	0.59	1	85	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**123Sb**	0.56	1	85	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	N	135Ba	214.70	1	85	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	Y	**137Ba**	216.10	1	85	3/24/2014	19:39	SAMP	J1402026-004	6020 W	
J1402026-004	N	203Tl	-0.07	1	86.4	3/24/2014	19:39	SAMP	J1402026-004	6020 W	

ALS Environmental

Analytical Run Coversheet

Analyst: Jordan Pauley　　Data File ID: 032414B　　LIMS Run #: 385020

Analysis: Mercury　　Method References: 245.1, 7470, 7471　　Inst ID: J-CVAA-01

Standard's Trace Numbers					
STD ID	JP 3/24/14 Trace #	Exp Date	STD ID	3/24/14 JP Trace #	Exp Date
Primary Working STD	JG Met13-65E	3/27/14	Stannous Chloride	JG Met13-65G	3/27/14
Secondary Working STD	-65F				

Standard	Conc (ug/L)	LCL 245.1	UCL 245.1	LCL 7000	UCL 7000	
MRL	0.1	50%	150%	50%	150%	
UQL	10					
LCS / LCSD	1.25	85%	115%	80%	120%	
LCS1(low)	0.5	70%	130%	70%	130%	
MS / MSD	1.25	70%	130%	75%	125%	
Post Spike	5	85%	115%	80%	120%	
ICV	5	95%	105%	90%	110%	
CCV	5	90%	110%	80%	120%	
DUP (RPD)			20%		20%	
SerialDilution			10%		10%	

Comments

Reviewed By / Date: JG 3/24/14

MERCURY DATA REPORTED WITH FAILING CRITERIA

Data File ID: 032414B

Sample ID	Failure(s)	Analyst's Comments

Methods: 245.1 / 7470 / 7471

ALS Environmental

Mercury Data Summary Sheet

Analyst: Jordan Pauley

Instrument ID: J-CVAA-01

Sample ID	RPT	Raw Conc (ug/L)	DF	UNITS	QC	Comment	Samp Type	Date	Time	Method
Calibration Blank	Y	0.000	1	ug/L			ICAL	03/24/14	16:43:25	
Standard #1	Y	0.100	1	ug/L			ICAL	03/24/14	16:44:32	
Standard #2	Y	0.500	1	ug/L			ICAL	03/24/14	16:45:39	
Standard #3	Y	1.000	1	ug/L			ICAL	03/24/14	16:47:11	
Standard #4	Y	3.000	1	ug/L			ICAL	03/24/14	16:48:47	
Standard #5	Y	5.000	1	ug/L			ICAL	03/24/14	16:50:36	
Standard #6	Y	10.000	1	ug/L			ICAL	03/24/14	16:52:36	
ICV	Y	4.957	1	ug/L	99.1%		ICV	03/24/14	16:54:53	
ICB	Y	-0.002	1	ug/L	CCB OK		CCB	03/24/14	16:56:51	
MRL 0.1	Y	0.097	1	ug/L	97.0%		MRL	03/24/14	16:57:58	
MB-02113-02	Y	0.001	1	ug/L	MB OK		MBLK	03/24/14	16:59:05	
LCS-02113-01	Y	1.254	1	ug/L	100.3%		LCS	03/24/14	17:00:12	
J1402025-001	Y	0.005	1	ug/L			SAMP	03/24/14	17:01:52	7470 D
J1402025-001MS	Y	1.229	1	ug/L	97.9%		MS	03/24/14	17:02:59	7470 D
J1402025-001MSD	Y	1.243	1	ug/L	99.0%		MSD	03/24/14	17:04:39	7470 D
J1402025-001PS	Y	4.940	1	ug/L	98.7%		PS	03/24/14	17:06:19	7470 D
J1402025-001SD 5x	Y	0.002	5	ug/L	**		SD	03/24/14	17:08:24	7470 D
J1402025-002	Y	0.008	1	ug/L			SAMP	03/24/14	17:09:33	7470 D
J1402025-003	Y	0.004	1	ug/L			SAMP	03/24/14	17:10:42	7470 D
J1402025-004	Y	0.006	1	ug/L			SAMP	03/24/14	17:11:51	7470 D
CCV-1	Y	5.001	1	ug/L	100.0%		CCV	03/24/14	17:12:59	
CCB-1	Y	0.004	1	ug/L	CCB OK		CCB	03/24/14	17:15:03	
J1402025-005	Y	0.008	1	ug/L			SAMP	03/24/14	17:16:12	7470 D
J1402025-006	Y	0.008	1	ug/L			SAMP	03/24/14	17:17:22	7470 D
J1402025-007	Y	0.003	1	ug/L			SAMP	03/24/14	17:18:29	7470 D
MB-01914-01	Y	0.009	1	ug/L	MB OK		MBLK	03/24/14	17:19:36	
LCS-01914-02	Y	1.230	1	ug/L	98.4%		LCS	03/24/14	17:20:44	
J1401630-001	Y	0.005	1	ug/L			SAMP	03/24/14	17:22:27	7470 TCLP
J1401630-001MS	Y	1.237	1	ug/L	98.6%		MS	03/24/14	17:23:34	7470 TCLP
J1401630-001MSD	Y	1.234	1	ug/L	98.3%		MSD	03/24/14	17:25:18	7470 TCLP
J1401630-001PS	Y	4.910	1	ug/L	98.1%		PS	03/24/14	17:27:00	7470 TCLP
J1401630-001SD 5x	Y	-0.001	5	ug/L	**		SD	03/24/14	17:28:57	7470 TCLP
CCV-2	Y	5.004	1	ug/L	100.1%		CCV	03/24/14	17:30:05	
CCB-2	Y	0.002	1	ug/L	CCB OK		CCB	03/24/14	17:32:02	
J1401630-003	Y	0.005	1	ug/L			SAMP	03/24/14	17:33:11	7470 TCLP
J1401630-004	Y	0.007	1	ug/L			SAMP	03/24/14	17:34:20	7470 TCLP
J1401630-005	Y	0.008	1	ug/L			SAMP	03/24/14	17:35:29	7470 TCLP
J1401630-006	Y	0.004	1	ug/L			SAMP	03/24/14	17:36:39	7470 TCLP
J1401630-007	Y	0.004	1	ug/L			SAMP	03/24/14	17:37:46	7470 TCLP
J1401630-009	Y	0.007	1	ug/L			SAMP	03/24/14	17:38:53	7470 TCLP
MB-01915-01	Y	0.008	1	ug/L	MB OK		MBLK	03/24/14	17:40:00	
LCS-01915-02	Y	1.250	1	ug/L	100.0%		LCS	03/24/14	17:41:08	
J1401630-002	Y	0.004	1	ug/L			SAMP	03/24/14	17:42:48	7470 TCLP
J1401630-008	Y	0.008	1	ug/L			SAMP	03/24/14	17:43:56	7470 TCLP
CCV-3	Y	4.990	1	ug/L	99.8%		CCV	03/24/14	17:45:04	

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** RPD not calculated. Difference < 2 x MRL.

^^ % Rec. not calculated. Analyte concentration > 4 x Spike concentraton

Methods: 245.1 / 7470 / 7471

Sample ID	RPT	Raw Conc (ug/L)	DF	UNITS	QC	Comment	Samp Type	Date	Time	Method
CCB-3	Y	0.001	1	ug/L	CCB OK		CCB	03/24/14	17:47:01	

328

** RPD not calculated. Difference < 2 x MRL.
^^ % Rec. not calculated, Analyte concentration > 4 x Spike concentraton.

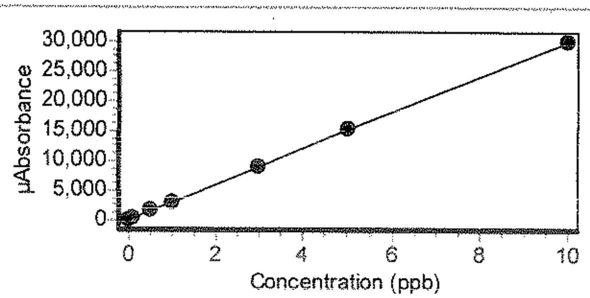
Report Generated By CETAC QuickTrace
Analyst: JAXMet
Worksheet file: J:\Mercury\Data\032414B JP 7470A.wsz
Date Started: 1/26/2010 14:48:08
Comment:

Results

Sample Name						Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
Calibration Blank						STD	03/24/14 04:43:25 pm	0.000	14	41.33	
Replicates	12.7	19.3	19.9	8.1	8.6						
Standard #1						STD	03/24/14 04:44:32 pm	0.100	302	1.65	
Replicates	302.3	307.6	306.0	301.4	294.7						
Standard #2						STD	03/24/14 04:45:39 pm	0.500	1572	0.64	
Replicates	1566.2	1581.8	1582.3	1572.1	1558.9						
Standard #3						STD	03/24/14 04:47:11 pm	1.000	3089	0.67	
Replicates	3064.0	3093.8	3106.4	3110.6	3072.0						
Standard #4						STD	03/24/14 04:48:47 pm	3.000	9105	0.49	
Replicates	9056.5	9112.3	9148.1	9148.2	9061.5						
Standard #5						STD	03/24/14 04:50:36 pm	5.000	15295	0.62	
Replicates	15213.0	15318.7	15391.8	15370.3	15180.4						
Standard #6						STD	03/24/14 04:52:36 pm	10.000	30032	0.51	
Replicates	29864.0	30042.6	30178.3	30186.8	29886.5						

Calibration

Equation: A = 9.123 + 3078.996C + -0.008*
R2: 0.99998
SEE: 56.4350
Flags:



Sample Name						Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
ICV						ICV	03/24/14 04:54:53 pm	4.957	15085	0.52	
Replicates	15003.5	15098.3	15161.5	15158.2	15001.8						
% Recovery	99.13										

Sample Name				Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
ICB				CCB	03/24/14 04:56:51 pm	-0.002	4	44.41	
Replicates	2.2	3.7	3.1	7.0	4.4				
MRL 0.1				CRDL	03/24/14 04:57:58 pm	0.097	308	2.23	
Replicates	311.9	312.7	312.8	304.7	297.2				
% Recovery	97.05								
MB-02113-02				MB	03/24/14 04:59:05 pm	0.001	11	37.81	
Replicates	10.1	12.3	17.0	10.7	5.3				
LCS-02113-01				LCS	03/24/14 05:00:12 pm	1.254	3858	0.51	
Replicates	3839.4	3862.0	3878.4	3875.2	3835.9				
% Recovery	100.32								
J1402025-001				UNK	03/24/14 05:01:52 pm	0.005	24	21.90	
Replicates	27.1	28.7	28.0	22.1	16.0				
J1402025-001S				MSK	03/24/14 05:02:59 pm	1.229	3781	0.71	
Replicates	3760.0	3791.4	3812.7	3794.2	3746.9				
% Recovery	97.90								
J1402025-001SD				MSDUP	03/24/14 05:04:39 pm	1.243	3824	0.57	
Replicates	3803.0	3826.8	3846.9	3842.5	3800.2				
% Recovery	99.02	RPD 1.13							
J1402025-001A				SPK	03/24/14 05:06:19 pm	4.940	15034	0.53	
Replicates	14953.9	15048.6	15112.7	15108.2	14948.0				
% Recovery	98.70								
J1402025-001L				UNK	03/24/14 05:08:24 pm	0.002	16	38.51	
Replicates	13.5	18.6	26.1	12.5	10.5				
J1402025-002				UNK	03/24/14 05:09:33 pm	0.008	33	20.18	
Replicates	32.6	37.8	40.5	32.8	22.9				
J1402025-003				UNK	03/24/14 05:10:42 pm	0.004	22	21.01	
Replicates	16.2	28.8	23.1	20.7	20.9				
J1402025-004				UNK	03/24/14 05:11:51 pm	0.006	27	16.42	
Replicates	31.8	22.6	25.4	32.1	24.1				

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
CCV-1					CCV	03/24/14 05:12:59 pm	5.001	15217	0.60	
Replicates	15132.2	15237.1	15308.5	15295.5	15111.7					
% Recovery	100.01									
CCB-1					CCB	03/24/14 05:15:03 pm	0.004	20	21.02	
Replicates	13.7	20.3	22.3	25.2	19.5					
J1402025-005					UNK	03/24/14 05:16:12 pm	0.008	34	15.31	
Replicates	39.6	38.2	36.9	30.4	27.5					
J1402025-006					UNK	03/24/14 05:17:22 pm	0.008	35	13.12	
Replicates	31.0	31.6	41.1	32.6	38.7					
J1402025-007					UNK	03/24/14 05:18:29 pm	0.003	19	56.21	
Replicates	19.2	28.4	30.6	13.4	4.5					
MB-01914-01					MB	03/24/14 05:19:36 pm	0.009	36	10.46	
Replicates	40.1	40.2	35.9	32.4	32.7					
LCS-01914-02					LCS	03/24/14 05:20:44 pm	1.230	3784	0.70	
Replicates	3758.5	3788.4	3816.1	3800.4	3755.1					
% Recovery	98.37									
J1401630-001					UNK	03/24/14 05:22:27 pm	0.005	25	13.09	
Replicates	24.5	26.9	28.9	26.5	20.1					
J1401630-001S					MSK	03/24/14 05:23:34 pm	1.237	3807	0.57	
Replicates	3784.3	3812.2	3827.4	3826.8	3783.9					
% Recovery	98.55									
J1401630-001SD					MSDUP	03/24/14 05:25:18 pm	1.234	3797	0.60	
Replicates	3775.6	3803.0	3822.5	3812.9	3771.1					
% Recovery	98.30	RPD 0.26								
J1401630-001A					SPK	03/24/14 05:27:00 pm	4.910	14944	0.57	
Replicates	14855.1	14962.4	15028.0	15021.1	14855.2					
% Recovery	98.09									
J1401630-001L					UNK	03/24/14 05:28:57 pm	-0.001	7	77.52	
Replicates	0.3	12.6	9.8	7.6	2.5					

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
CCV-2					CCV	03/24/14 05:30:05 pm	5.004	15226	0.62	
Replicates	15149.3	15249.5	15322.7	15303.2	15106.9					
% Recovery	100.07									
CCB-2					CCB	03/24/14 05:32:02 pm	0.002	14	34.66	
Replicates	10.7	16.9	18.3	18.9	7.7					
J1401630-003					UNK	03/24/14 05:33:11 pm	0.005	25	27.39	
Replicates	20.6	29.7	29.9	30.2	15.2					
J1401630-004					UNK	03/24/14 05:34:20 pm	0.007	32	22.17	
Replicates	19.9	31.3	34.6	37.8	35.3					
J1401630-005					UNK	03/24/14 05:35:29 pm	0.008	32	9.95	
Replicates	30.9	37.3	33.9	29.4	30.5					
J1401630-006					UNK	03/24/14 05:36:39 pm	0.004	22	31.95	
Replicates	16.0	27.4	30.1	23.3	13.8					
J1401630-007					UNK	03/24/14 05:37:46 pm	0.004	21	23.68	
Replicates	25.0	26.9	21.6	20.1	13.7					
J1401630-009					UNK	03/24/14 05:38:53 pm	0.007	30	13.29	
Replicates	34.0	33.8	27.4	25.6	27.4					
MB-01915-01					MB	03/24/14 05:40:00 pm	0.008	32	18.58	
Replicates	31.6	37.2	38.5	31.5	23.2					
LCS-01915-02					LCS	03/24/14 05:41:08 pm	1.250	3845	0.65	
Replicates	3818.6	3853.1	3873.7	3862.2	3819.6					
% Recovery	99.98									
J1401630-002					UNK	03/24/14 05:42:48 pm	0.004	21	25.74	
Replicates	21.0	25.8	27.1	19.4	13.4					
J1401630-008					UNK	03/24/14 05:43:56 pm	0.008	32	10.04	
Replicates	27.9	35.6	35.4	32.2	30.9					

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
CCV-3					CCV	03/24/14 05:45:04 pm	4.990	15185	0.68	
Replicates	15108.7	15220.6	15287.7	15258.9	15046.9					
% Recovery	99.80									
CCB-3					CCB	03/24/14 05:47:01 pm	0.001	13	59.14	
Replicates	14.0	15.9	21.4	13.6	0.4					

Columbia Analytical Services

Analytical Run Coversheet

Analyst: LFISCHER | Data File ID: 032114A1 | LIMS Run #: ~~384856~~ 384858

Analysis: ICP-AES | Method References: 200.7 / 6010 | Inst ID: J-ICP-AES-01

Standard's Trace Numbers

STD ID	Trace #	Exp Date	STD ID	Trace #	Exp Date
ICAL-1	Met.17-80A	4-3-14	INT STD	Met 17-79B	5-9-14
ICAL-2	B	↓	ICSA	77A	5-9-14
ICAL-3 / CCV	C	↓	ICSAB	77B	↓
ICAL-4	D	↓	Blank / Diluent	80G	3-6-15
ICV	Met.17-78B	3-24-14			

Standard Concentrations and Ranges

Element	MRL	Linear Range	ICV	CCV	LCS	ICSA	ICSAB	Units
Ag	0.01	5	0.5	0.5	0.5	0	0.2	mg/L
Al	0.1	1000	50	5	5	750	752	mg/L
As	0.01	40	1	0.5	0.5	0	0.2	mg/L
B	0.05	200	4	2.5	2.5	0	1	mg/L
Ba	0.01	45	2	0.5	0.5	0	0.2	mg/L
Be	0.004	8	0.5	0.2	0.2	0	0.08	mg/L
Ca	0.1	3500	80	5	5	750	752	mg/L
Cd	0.005	15	0.4	0.25	0.25	0	0.1	mg/L
Co	0.01	100	1	0.5	0.5	0	0.2	mg/L
Cr	0.01	100	1	0.5	0.5	0	0.2	mg/L
Cu	0.01	225	1	0.5	0.5	0	0.2	mg/L
Fe	0.1	1200	40	5	5	750	752	mg/L
K	2	1000	20	100	100	0	40	mg/L
Li	0.1	50	5	5	5	0	2	mg/L
Mg	0.1	1000	20	5	5	750	752	mg/L
Mn	0.01	20	2	0.5	0.5	0	0.2	mg/L
Mo	0.01	25	2	0.5	0.5	0	0.2	mg/L
Na	0.5	500	20	25	25	0	10	mg/L
Ni	0.01	100	2	0.5	0.5	0	0.2	mg/L
P	0.1	500	10	5	5	0	2	mg/L
Pb	0.01	200	0.5	0.5	0.5	0	0.2	mg/L
Sb	0.01	200	1	0.5	0.5	0	0.2	mg/L
Se	0.01	50	2	0.5	0.5	0	0.2	mg/L
Sn	0.04	125	5	2	2	0	0.8	mg/L
Sr	0.01	8	2	0.5	0.5	0	0.2	mg/L
Ti	0.05	64	5	2.5	2.5	0	1	mg/L
Tl	0.01	125	0.2	0.5	0.5	0	0.2	mg/L
V	0.02	100	2	1	1	0	0.4	mg/L
Zn	0.02	50	5	1	1	0	0.4	mg/L

Comments

Total and TCLP T1400360Z included in Run

Total and dissolved J1402025 included in Run

Tier II includes J1402025

Reviewed By / Date: LF 3/24/14

ICP Run Sequence **Date File ID:** **032114A1**

#	Samp / Std ID	Date	Time	#	Samp / Std ID	Date	Time	#	Samp / Std ID	Date	Time
1	Calib Blank	3/21/14	17:42	56	J1402037-003	3/21/14	22:02				
2	Calib Std 1	3/21/14	17:47	57	MB-02092-01	3/21/14	22:07				
3	Calib Std 2	3/21/14	17:52	58	LCS-02092-02	3/21/14	22:11				
4	Calib Std 3	3/21/14	17:55	59	J1401847-003	3/21/14	22:15				
5	Calib Std 4	3/21/14	17:59	60	CCV	3/21/14	22:19				
6	ICV	3/21/14	18:02	61	CCB	3/21/14	22:23				
7	ICB	3/21/14	18:06	62	J1401935-002	3/21/14	22:28				
8	Blank	3/21/14	18:11	63	J1401935-003	3/21/14	22:33				
9	MRL	3/21/14	18:16	64	J1401935-003S	3/21/14	22:37				
10	ICSA	3/21/14	18:20	65	J1401935-003SD	3/21/14	22:40				
11	ICSAB	3/21/14	18:28	66	J1401935-003L	3/21/14	22:44				
12	CCV	3/21/14	18:36	67	J1401935-003A	3/21/14	22:48				
13	CCB	3/21/14	18:40	68	J1401935-004	3/21/14	22:53				
14	T1400360-002 2x	3/21/14	18:44	69	J1401935-005	3/21/14	22:58				
15	T1400365-001 5x	3/21/14	18:54	70	J1401935-006	3/21/14	23:03				
16	J1401993-001 2x	3/21/14	18:57	71	T1400360-003	3/21/14	23:08				
17	MB-02131-02	3/21/14	19:07	72	CCV	3/21/14	23:11				
18	LCS-02131-01	3/21/14	19:10	73	CCB	3/21/14	23:16				
19	J1402002-001	3/21/14	19:15	74	MB-02088-01	3/21/14	23:20				
20	J1402003-001	3/21/14	19:25	75	LCS-02088-02	3/21/14	23:24				
21	J1402003-002	3/21/14	19:30	76	J1401935-001	3/21/14	23:28				
22	J1402003-003	3/21/14	19:34	77	J1401935-001S	3/21/14	23:32				
23	J1402003-004	3/21/14	19:39	78	J1401935-001SD	3/21/14	23:35				
24	CCV	3/21/14	19:43	79	J1401935-001L	3/21/14	23:40				
25	CCB	3/21/14	19:47	80	J1401935-001A	3/21/14	23:43				
26	J1402005-001	3/21/14	19:52	81	T1400360-002	3/21/14	23:48				
27	J1402005-004	3/21/14	19:56	82	MB-02087-01	3/21/14	23:53				
28	J1402022-001	3/21/14	20:01	83	LCS-02087-02	3/21/14	23:56				
29	J1402022-002	3/21/14	20:06	84	CCV	3/21/14	23:59				
30	J1402022-003	3/21/14	20:11	85	CCB	3/22/14	00:04				
31	J1402022-004	3/21/14	20:16	86	J1401898-001	3/22/14	00:09				
32	J1402022-005	3/21/14	20:21	87	T1400360-001	3/22/14	00:14				
33	J1402025-001	3/21/14	20:26	88	MB-02130-02	3/22/14	00:19				
34	J1402025-002	3/21/14	20:31	89	LCS-02130-01	3/22/14	00:22				
35	J1402025-003	3/21/14	20:35	90	J1402025-001	3/22/14	00:27				
36	CCV	3/21/14	20:39	91	J1402025-002	3/22/14	00:32				
37	CCB	3/21/14	20:43	92	J1402025-002S	3/22/14	00:35				
38	J1402025-004	3/21/14	20:48	93	J1402025-002SD	3/22/14	00:38				
39	J1402025-005	3/21/14	20:53	94	J1402025-002L	3/22/14	00:43				
40	J1402025-006	3/21/14	20:58	95	J1402025-002A	3/22/14	00:46				
41	J1402025-007	3/21/14	21:03	96	CCV	3/22/14	00:49				
42	J1402025-007S	3/21/14	21:06	97	CCB	3/22/14	00:54				
43	J1402025-007SD	3/21/14	21:09	98	J1402025-003	3/22/14	00:59				
44	J1402025-007L	3/21/14	21:14	99	J1402025-004	3/22/14	01:04				
45	J1402025-007A	3/21/14	21:17	100	J1402025-005	3/22/14	01:09				
46	J1402037-001	3/21/14	21:22	101	J1402025-006	3/22/14	01:13				
47	MB-02132-02	3/21/14	21:27	102	J1402025-007	3/22/14	01:18				
48	CCV	3/21/14	21:30	103	ICSA	3/22/14	01:22				
49	CCB	3/21/14	21:35	104	ICSAB	3/22/14	01:30				
50	LCS-02132-01	3/21/14	21:38	105	CCV	3/22/14	01:38				
51	J1402037-002	3/21/14	21:43	106	CCB	3/22/14	01:42				
52	J1402037-002S	3/21/14	21:46								
53	J1402037-002SD	3/21/14	21:49								
54	J1402037-002L	3/21/14	21:54								
55	J1402037-002A	3/21/14	21:58								

NB

ICP DATA REPORTED WITH FAILING CRITERIA

Data File ID: 032114A1

Sample ID	Analyte	Failure(s)	Analyst's Comments

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Reprocessing Begun
Logged In Analyst: ALJCK.NOUSER Technique: ICP Continuous

Results Data Set (original): 032114A
Results Library (original): C:\pe\JAXMET01\Results\1403.mdb
Results Data Set (reprocessed): 032114A1
Results Library (reprocessed): C:\pe\JAXMET01\Results\1403.mdb

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Sequence No.: 1 Autosampler Location: 905
Sample ID: Calib Blank Date Collected: 3/21/2014 17:39:58
Analyst: Data Type: Reprocessed on 3/24/2014 09:27:01
Logged In Analyst (Original) : ALJCK.NOUSER
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: Calib Blank

Analyte	Back Pressure	Flow
All	220.0 kPa	0.68 L/min

Mean Data: Calib Blank

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029 Radial	602006.2	5560.56	0.92%	100.0	%
Y 371.029 Axial	12728428.4	102432.97	0.80%	100.0	%
Ag 328.068†	2637.2	64.15	2.43%	[0.00]	mg/L
Al 394.401†	-2386.9	13.84	0.58%	[0.00]	mg/L
As 188.979†	-22.2	1.06	4.78%	[0.00]	mg/L
B 208.956†	242.1	8.31	3.43%	[0.00]	mg/L
Ba 233.527†	-200.2	5.35	2.67%	[0.00]	mg/L
Be 313.107†	-14715.4	186.34	1.27%	[0.00]	mg/L
Ca 315.887†	-263.0	7.14	2.71%	[0.00]	mg/L
Cd 228.802†	158.0	4.30	2.72%	[0.00]	mg/L
Co 228.616†	148.0	17.10	11.55%	[0.00]	mg/L
Cr 267.716†	243.0	16.70	6.87%	[0.00]	mg/L
Cu 327.393†	794.9	49.23	6.19%	[0.00]	mg/L
Fe 273.955†	40.5	10.82	26.70%	[0.00]	mg/L
K 766.490 R†	1969.8	123.12	6.25%	[0.00]	mg/L
Mg 279.077†	-272.1	10.05	3.69%	[0.00]	mg/L
Mn 257.610†	578.2	30.49	5.27%	[0.00]	mg/L
Mo 202.031†	434.1	6.54	1.51%	[0.00]	mg/L
Na 589.592 R†	8364.4	208.74	2.50%	[0.00]	mg/L
Ni 231.604†	454.4	7.60	1.67%	[0.00]	mg/L
P 213.617†	-959.7	19.49	2.03%	[0.00]	mg/L
Pb 220.353†	-59.9	6.67	11.14%	[0.00]	mg/L
Sb 206.836†	40.7	1.17	2.88%	[0.00]	mg/L
Se 196.026†	-48.0	1.31	2.72%	[0.00]	mg/L
Sn 189.927†	-120.3	17.44	14.50%	[0.00]	mg/L
Sr 421.552R†	691.2	25.01	3.62%	[0.00]	mg/L
Ti 337.279†	2568.0	85.45	3.33%	[0.00]	mg/L
Tl 190.801†	-169.5	7.62	4.50%	[0.00]	mg/L
V 290.880†	1593.8	26.22	1.65%	[0.00]	mg/L
Zn 206.200†	136.7	51.24	37.50%	[0.00]	mg/L
Li 670.784†	65.0	134.21	206.37%	[0.00]	mg/L

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Sequence No.: 2 Autosampler Location: 901
Sample ID: Calib Std 1 Date Collected: 3/21/2014 17:44:52
Analyst: Data Type: Reprocessed on 3/24/2014 09:27:06
Logged In Analyst (Original) : ALJCK.NOUSER
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: Calib Std 1

Analyte	Back Pressure	Flow
All	220.0 kPa	0.68 L/min

Mean Data: Calib Std 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029 Radial	587224.8	3155.36	0.54%	97.54	%
Y 371.029 Axial	12591560.7	128385.18	1.02%	98.92	%
Ag 328.068†	2682.9	114.69	4.27%	[0.01]	mg/L
Al 394.401†	99.6	14.74	14.81%	[0.1]	mg/L
As 188.979†	40.4	2.53	6.26%	[0.01]	mg/L
B 208.956†	864.0	3.96	0.46%	[0.05]	mg/L
Ba 233.527†	3036.4	12.36	0.41%	[0.01]	mg/L
Be 313.107†	13845.7	82.95	0.60%	[0.004]	mg/L
Ca 315.887†	842.9	10.96	1.30%	[0.1]	mg/L
Cd 228.802†	606.4	11.97	1.97%	[0.005]	mg/L
Co 228.616†	1159.1	29.94	2.58%	[0.01]	mg/L
Cr 267.716†	1367.2	7.34	0.54%	[0.01]	mg/L
Cu 327.393†	1843.1	46.10	2.50%	[0.01]	mg/L
Fe 273.955†	237.8	2.80	1.18%	[0.1]	mg/L
K 766.490 R†	14057.5	363.94	2.59%	[2]	mg/L
Mg 279.077†	127.5	8.70	6.82%	[0.1]	mg/L
Mn 257.610†	13079.1	108.58	0.83%	[0.01]	mg/L
Mo 202.031†	398.7	8.27	2.08%	[0.01]	mg/L
Na 589.592 R†	10422.2	33.34	0.32%	[0.5]	mg/L
Ni 231.604†	544.9	19.25	3.53%	[0.01]	mg/L
P 213.617†	588.4	13.79	2.34%	[0.1]	mg/L
Pb 220.353†	99.2	10.02	10.10%	[0.01]	mg/L
Sb 206.836†	36.2	3.61	9.96%	[0.01]	mg/L
Se 196.026†	27.1	5.98	22.04%	[0.01]	mg/L
Sn 189.927†	614.7	4.74	0.77%	[0.04]	mg/L
Sr 421.552R†	7937.9	56.37	0.71%	[0.01]	mg/L
Ti 337.279†	28696.6	210.55	0.73%	[0.05]	mg/L
Tl 190.801†	80.5	11.64	14.46%	[0.01]	mg/L
V 290.880†	3105.1	20.96	0.67%	[0.02]	mg/L
Zn 206.200†	1610.9	27.50	1.71%	[0.02]	mg/L
Li 670.784†	20657.6	89.42	0.43%	[0.1]	mg/L

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Sequence No.: 3
Sample ID: Calib Std 2
Analyst:
Logged In Analyst (Original) : ALJCK.NOUSER
Initial Sample Wt:
Dilution:

Autosampler Location: 906
Date Collected: 3/21/2014 17:49:43
Data Type: Reprocessed on 3/24/2014 09:27:07
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: Calib Std 2

Analyte	Back Pressure	Flow
All	220.0 kPa	0.68 L/min

Mean Data: Calib Std 2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029 Radial	587777.6	5620.73	0.96%	97.64	%
Y 371.029 Axial	12574271.5	153166.65	1.22%	98.79	%
Ag 328.068†	27136.5	228.01	0.84%	[0.1]	mg/L
Al 394.401†	1787.0	8.44	0.47%	[1]	mg/L
As 188.979†	406.5	2.95	0.73%	[0.1]	mg/L
B 208.956†	8510.7	100.59	1.18%	[0.5]	mg/L
Ba 233.527†	30505.4	200.92	0.66%	[0.1]	mg/L
Be 313.107†	138819.3	1166.05	0.84%	[0.04]	mg/L
Ca 315.887†	8319.7	98.19	1.18%	[1]	mg/L
Cd 228.802†	6061.0	68.46	1.13%	[0.05]	mg/L
Co 228.616†	11435.3	110.76	0.97%	[0.1]	mg/L
Cr 267.716†	13333.9	152.39	1.14%	[0.1]	mg/L
Cu 327.393†	19761.1	209.59	1.06%	[0.1]	mg/L
Fe 273.955†	2243.3	22.24	0.99%	[1]	mg/L
K 766.490 R†	142042.5	194.71	0.14%	[20]	mg/L
Mg 279.077†	1334.1	31.47	2.36%	[1]	mg/L
Mn 257.610†	131758.8	1059.21	0.80%	[0.1]	mg/L
Mo 202.031†	3873.6	33.30	0.86%	[0.1]	mg/L
Na 589.592 R†	98196.4	127.12	0.13%	[5]	mg/L

Ni 231.604†	5324.1	54.43	1.02%	[0.1]	mg/L
P 213.617†	5870.4	41.89	0.71%	[1]	mg/L
Pb 220.353†	1101.4	11.76	1.07%	[0.1]	mg/L
Sb 206.836†	477.5	2.30	0.48%	[0.1]	mg/L
Se 196.026†	266.9	4.96	1.86%	[0.1]	mg/L
Sn 189.927†	6146.5	57.79	0.94%	[0.4]	mg/L
Sr 421.552R†	77618.8	151.24	0.19%	[0.1]	mg/L
Ti 337.279†	285387.2	2494.39	0.87%	[0.5]	mg/L
Tl 190.801†	888.1	14.91	1.68%	[0.1]	mg/L
V 290.880†	32220.3	219.53	0.68%	[0.2]	mg/L
Zn 206.200†	17698.1	188.98	1.07%	[0.2]	mg/L
Li 670.784†	201584.1	112.46	0.06%	[1]	mg/L

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Sequence No.: 4 Autosampler Location: 904
Sample ID: Calib Std 3 Date Collected: 3/21/2014 17:54:34
Analyst: Data Type: Reprocessed on 3/24/2014 09:27:08
Logged In Analyst (Original) : ALJCK.NOUSER
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: Calib Std 3

Analyte	Back Pressure	Flow
All	220.0 kPa	0.68 L/min

Mean Data: Calib Std 3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029 Radial	602360.9	5046.44	0.84%	100.1	%
Y 371.029 Axial	12339877.2	151435.98	1.23%	96.95	%
Ag 328.068†	137709.6	1255.29	0.91%	[0.5]	mg/L
Al 394.401†	9168.2	44.56	0.49%	[5]	mg/L
As 188.979†	2085.5	57.10	2.74%	[0.5]	mg/L
B 208.956†	42655.8	792.93	1.86%	[2.5]	mg/L
Ba 233.527†	152987.5	1252.67	0.82%	[0.5]	mg/L
Be 313.107†	713309.4	5644.53	0.79%	[0.2]	mg/L
Ca 315.887†	40688.0	346.13	0.85%	[5]	mg/L
Cd 228.802†	30485.8	543.84	1.78%	[0.25]	mg/L
Co 228.616†	56784.6	944.61	1.66%	[0.5]	mg/L
Cr 267.716†	66227.6	1134.01	1.71%	[0.5]	mg/L
Cu 327.393†	99189.4	1074.85	1.08%	[0.5]	mg/L
Fe 273.955†	10821.4	112.80	1.04%	[5]	mg/L
K 766.490 R†	701997.9	2094.28	0.30%	[100]	mg/L
Mg 279.077†	6490.0	45.34	0.70%	[5]	mg/L
Mn 257.610†	657694.2	5898.77	0.90%	[0.5]	mg/L
Mo 202.031†	19358.3	318.57	1.65%	[0.5]	mg/L
Na 589.592 R†	476547.7	892.47	0.19%	[25]	mg/L
Ni 231.604†	26529.6	537.96	2.03%	[0.5]	mg/L
P 213.617†	29883.1	451.00	1.51%	[5]	mg/L
Pb 220.353†	5486.0	85.16	1.55%	[0.5]	mg/L
Sb 206.836†	2437.8	31.29	1.28%	[0.5]	mg/L
Se 196.026†	1335.1	16.59	1.24%	[0.5]	mg/L
Sn 189.927†	30689.9	503.98	1.64%	[2]	mg/L
Sr 421.552R†	378553.9	1030.55	0.27%	[0.5]	mg/L
Ti 337.279†	1436322.3	13189.12	0.92%	[2.5]	mg/L
Tl 190.801†	4450.8	51.12	1.15%	[0.5]	mg/L
V 290.880†	163157.3	1424.77	0.87%	[1]	mg/L
Zn 206.200†	94261.7	792.13	0.84%	[1]	mg/L
Li 670.784†	982363.7	2425.24	0.25%	[5]	mg/L

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Sequence No.: 5 Autosampler Location: 907
Sample ID: Calib Std 4 Date Collected: 3/21/2014 17:57:41
Analyst: Data Type: Reprocessed on 3/24/2014 09:27:08
Logged In Analyst (Original) : ALJCK.NOUSER
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: Calib Std 4

Analyte	Back Pressure	Flow
All	220.0 kPa	0.68 L/min

Mean Data: Calib Std 4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029 Radial	590876.0	6767.67	1.15%	98.15	%
Y 371.029 Axial	12061030.4	781.52	0.01%	94.76	%
Ag 328.068†	276856.6	1313.73	0.47%	[1]	mg/L
Al 394.401†	18670.1	183.45	0.98%	[10]	mg/L
As 188.979†	4287.6	44.35	1.03%	[1]	mg/L
B 208.956†	89026.7	395.68	0.44%	[5]	mg/L
Ba 233.527†	304780.3	1142.87	0.37%	[1]	mg/L
Be 313.107†	1434328.8	5155.89	0.36%	[0.4]	mg/L
Ca 315.887†	82525.4	756.79	0.92%	[10]	mg/L
Cd 228.802†	61696.7	550.33	0.89%	[0.5]	mg/L
Co 228.616†	117789.6	303.99	0.26%	[1]	mg/L
Cr 267.716†	138057.7	645.14	0.47%	[1]	mg/L
Cu 327.393†	198505.1	827.11	0.42%	[1]	mg/L
Fe 273.955†	21927.3	184.91	0.84%	[10]	mg/L
K 766.490 R†	1412723.2	1505.48	0.11%	[200]	mg/L
Mg 279.077†	13140.3	87.21	0.66%	[10]	mg/L
Mn 257.610†	1311227.4	4836.20	0.37%	[1]	mg/L
Mo 202.031†	38984.9	238.17	0.61%	[1]	mg/L
Na 589.592 R†	953345.3	2460.31	0.26%	[50]	mg/L
Ni 231.604†	52995.6	268.59	0.51%	[1]	mg/L
P 213.617†	60864.4	466.35	0.77%	[10]	mg/L
Pb 220.353†	11010.0	55.69	0.51%	[1]	mg/L
Sb 206.836†	5003.4	55.29	1.10%	[1]	mg/L
Se 196.026†	2740.2	30.61	1.12%	[1]	mg/L
Sn 189.927†	61376.8	422.85	0.69%	[4]	mg/L
Sr 421.552R†	753387.5	2103.24	0.28%	[1]	mg/L
Ti 337.279†	2871525.5	14225.29	0.50%	[5]	mg/L
Tl 190.801†	8918.6	110.61	1.24%	[1]	mg/L
V 290.880†	326060.8	1201.30	0.37%	[2]	mg/L
Zn 206.200†	188232.1	370.26	0.20%	[2]	mg/L
Li 670.784†	1952344.1	7131.60	0.37%	[10]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin Thru 0	0.0	276500	0.00000	0.999996	
Al 394.401	4	Lin, Calc Int	-73.4	1869	0.00000	0.999963	
As 188.979	4	Wt. Lin	-1.5	4184	0.00000	0.999769	
B 208.956	4	Lin Thru 0	0.0	17650	0.00000	0.999854	
Ba 233.527	4	Wt. Lin	-17.1	305300	0.00000	0.999999	
Be 313.107	4	Wt. Lin	-365.4	3547000	0.00000	0.999904	
Ca 315.887	4	Wt. Lin	20.9	8226	0.00000	0.999961	
Cd 228.802	4	Wt. Lin	-5.3	122300	0.00000	0.999972	
Co 228.616	4	Wt. Lin	5.5	115200	0.00000	0.999860	
Cr 267.716	4	Wt. Lin	19.9	134600	0.00000	0.999811	
Cu 327.393	4	Wt. Lin	-144.5	198800	0.00000	1.000000	
Fe 273.955	4	Lin Thru 0	0.0	2188	0.00000	0.999984	
K 766.490 R	4	Lin Thru 0	0.0	7055	0.00000	0.999997	
Mg 279.077	4	Lin Thru 0	0.0	1311	0.00000	0.999987	
Mn 257.610	4	Wt. Lin	-67.1	1315000	0.00000	0.999997	
Mo 202.031	4	Wt. Lin	10.9	38770	0.00000	0.999992	
Na 589.592 R	4	Lin Thru 0	0.0	19070	0.00000	0.999996	
Ni 231.604	4	Wt. Lin	14.7	53030	0.00000	1.000000	
P 213.617	4	Wt. Lin	-11.1	5986	0.00000	0.999891	
Pb 220.353	4	Lin Thru 0	0.0	11000	0.00000	0.999999	
Sb 206.836	4	Wt. Lin	-13.2	4943	0.00000	0.999937	
Se 196.026	4	Lin, Calc Int	-6.5	2734	0.00000	0.999920	
Sn 189.927	4	Wt. Lin	0.7	15350	0.00000	1.000000	
Sr 421.552R	4	Lin Thru 0	0.0	754300	0.00000	0.999995	
Ti 337.279	4	Wt. Lin	23.0	573300	0.00000	0.999995	
Tl 190.801	4	Wt. Lin	-8.9	8938	0.00000	0.999997	
V 290.880	4	Wt. Lin	-152.2	162800	0.00000	0.999991	
Zn 206.200	4	Lin Thru 0	0.0	94100	0.00000	0.999985	
Li 670.784	4	Wt. Lin	962.6	197200	0.00000	0.999921	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
Calib Blank	Y	Ag	[0.00]	1	[0.00]	3/21/2014	17:42	ICAL		
Calib Blank	Y	Al	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	As	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	B	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Ba	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Be	[0.00]	1	[0.00]	3/21/2014	17:42	ICAL		
Calib Blank	Y	Ca	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	Cd	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Co	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Cr	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Cu	[0.00]	1	[0.00]	3/21/2014	17:42	ICAL		
Calib Blank	Y	Fe	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	K	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	Li	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	Mg	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	Mn	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Mo	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Na	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	Ni	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	P	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Pb	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Sb	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Se	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Sn	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Sr	[0.00]	1	[0.00]	3/21/2014	17:41	ICAL		
Calib Blank	Y	Ti	[0.00]	1	[0.00]	3/21/2014	17:42	ICAL		
Calib Blank	Y	Tl	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	V	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Blank	Y	Zn	[0.00]	1	[0.00]	3/21/2014	17:43	ICAL		
Calib Std 1	Y	Ag	[0.01]	1	98.92	3/21/2014	17:47	ICAL		
Calib Std 1	Y	Al	[0.1]	1	97.54	3/21/2014	17:46	ICAL		
Calib Std 1	Y	As	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	B	[0.05]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Ba	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Be	[0.004]	1	98.92	3/21/2014	17:47	ICAL		
Calib Std 1	Y	Ca	[0.1]	1	97.54	3/21/2014	17:46	ICAL		
Calib Std 1	Y	Cd	[0.005]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Co	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Cr	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Cu	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Fe	[0.1]	1	97.54	3/21/2014	17:46	ICAL		
Calib Std 1	Y	K	[2]	1	97.54	3/21/2014	17:46	ICAL		
Calib Std 1	Y	Li	[0.1]	1	98.92	3/21/2014	17:46	ICAL		
Calib Std 1	Y	Mg	[0.1]	1	97.54	3/21/2014	17:46	ICAL		
Calib Std 1	Y	Mn	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Mo	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Na	[0.5]	1	97.54	3/21/2014	17:46	ICAL		
Calib Std 1	Y	Ni	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	P	[0.1]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Pb	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Sb	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Se	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Sn	[0.04]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Sr	[0.01]	1	97.54	3/21/2014	17:46	ICAL		
Calib Std 1	Y	Ti	[0.05]	1	98.92	3/21/2014	17:47	ICAL		
Calib Std 1	Y	Tl	[0.01]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	V	[0.02]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 1	Y	Zn	[0.02]	1	98.92	3/21/2014	17:48	ICAL		
Calib Std 2	Y	Ag	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Al	[1]	1	97.64	3/21/2014	17:51	ICAL		
Calib Std 2	Y	As	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	B	[0.5]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Ba	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Be	[0.04]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Ca	[1]	1	97.64	3/21/2014	17:51	ICAL		
Calib Std 2	Y	Cd	[0.05]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Co	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Cr	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Cu	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Fe	[1]	1	97.64	3/21/2014	17:51	ICAL		
Calib Std 2	Y	K	[20]	1	97.64	3/21/2014	17:51	ICAL		
Calib Std 2	Y	Li	[1]	1	98.79	3/21/2014	17:51	ICAL		
Calib Std 2	Y	Mg	[1]	1	97.64	3/21/2014	17:51	ICAL		
Calib Std 2	Y	Mn	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Mo	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Na	[5]	1	97.64	3/21/2014	17:51	ICAL		
Calib Std 2	Y	Ni	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	P	[1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Pb	[0.1]	1	98.79	3/21/2014	17:52	ICAL		

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
Calib Std 2	Y	Sb	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Se	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Sn	[0.4]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Sr	[0.1]	1	97.64	3/21/2014	17:51	ICAL		
Calib Std 2	Y	Ti	[0.5]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Tl	[0.1]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	V	[0.2]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 2	Y	Zn	[0.2]	1	98.79	3/21/2014	17:52	ICAL		
Calib Std 3	Y	Ag	[0.5]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Al	[5]	1	100.1	3/21/2014	17:55	ICAL		
Calib Std 3	Y	As	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	B	[2.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Ba	[0.5]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Be	[0.2]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Ca	[5]	1	100.1	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Cd	[0.25]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Co	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Cr	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Cu	[0.5]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Fe	[5]	1	100.1	3/21/2014	17:55	ICAL		
Calib Std 3	Y	K	[100]	1	100.1	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Li	[5]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Mg	[5]	1	100.1	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Mn	[0.5]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Mo	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Na	[25]	1	100.1	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Ni	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	P	[5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Pb	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Sb	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Se	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Sn	[2]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	Sr	[0.5]	1	100.1	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Ti	[2.5]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Tl	[0.5]	1	96.95	3/21/2014	17:56	ICAL		
Calib Std 3	Y	V	[1]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 3	Y	Zn	[1]	1	96.95	3/21/2014	17:55	ICAL		
Calib Std 4	Y	Ag	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Al	[10]	1	98.15	3/21/2014	17:58	ICAL		
Calib Std 4	Y	As	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	B	[5]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Ba	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Be	[0.4]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Ca	[10]	1	98.15	3/21/2014	17:58	ICAL		
Calib Std 4	Y	Cd	[0.5]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Co	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Cr	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Cu	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Fe	[10]	1	98.15	3/21/2014	17:58	ICAL		
Calib Std 4	Y	K	[200]	1	98.15	3/21/2014	17:58	ICAL		
Calib Std 4	Y	Li	[10]	1	94.76	3/21/2014	17:58	ICAL		
Calib Std 4	Y	Mg	[10]	1	98.15	3/21/2014	17:58	ICAL		
Calib Std 4	Y	Mn	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Mo	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Na	[50]	1	98.15	3/21/2014	17:58	ICAL		
Calib Std 4	Y	Ni	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	P	[10]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Pb	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Sb	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Se	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Sn	[4]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Sr	[1]	1	98.15	3/21/2014	17:58	ICAL		
Calib Std 4	Y	Ti	[5]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Tl	[1]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	V	[2]	1	94.76	3/21/2014	17:59	ICAL		
Calib Std 4	Y	Zn	[2]	1	94.76	3/21/2014	17:59	ICAL		
ICV	Y	Ag	0.504	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Al	50.080	1	99.6	3/21/2014	18:01	ICV		
ICV	Y	As	1.001	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	B	3.937	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Ba	1.967	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Be	0.502	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Ca	80.620	1	99.6	3/21/2014	18:01	ICV		
ICV	Y	Cd	0.399	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Co	1.002	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Cr	1.015	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Cu	1.000	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Fe	39.160	1	99.6	3/21/2014	18:01	ICV		
ICV	Y	K	20.640	1	99.6	3/21/2014	18:01	ICV		

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
ICV	Y	Li	5.127	1	95.89	3/21/2014	18:01	ICV		
ICV	Y	Mg	19.710	1	99.6	3/21/2014	18:01	ICV		
ICV	Y	Mn	1.960	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Mo	1.971	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Na	20.590	1	99.6	3/21/2014	18:01	ICV		
ICV	Y	Ni	2.014	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	P	9.872	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Pb	0.492	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Sb	0.991	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Se	1.988	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Sn	4.863	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Sr	2.017	1	99.6	3/21/2014	18:01	ICV		
ICV	Y	Ti	4.920	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Tl	0.203	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	V	1.994	1	95.89	3/21/2014	18:02	ICV		
ICV	Y	Zn	4.823	1	95.89	3/21/2014	18:02	ICV		
ICB	Y	Ag	0.000	1	99.41	3/21/2014	18:06	CCB		
ICB	Y	Al	-0.034	1	97.16	3/21/2014	18:05	CCB		
ICB	Y	As	-0.001	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	B	0.023	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Ba	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Be	0.000	1	99.41	3/21/2014	18:06	CCB		
ICB	Y	Ca	-0.006	1	97.16	3/21/2014	18:05	CCB		
ICB	Y	Cd	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Co	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Cr	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Cu	0.001	1	99.41	3/21/2014	18:06	CCB		
ICB	Y	Fe	0.001	1	97.16	3/21/2014	18:05	CCB		
ICB	Y	K	0.055	1	97.16	3/21/2014	18:05	CCB		
ICB	Y	Li	-0.005	1	99.41	3/21/2014	18:05	CCB		
ICB	Y	Mg	-0.018	1	97.16	3/21/2014	18:05	CCB		
ICB	Y	Mn	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Mo	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Na	0.019	1	97.16	3/21/2014	18:05	CCB		
ICB	Y	Ni	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	P	-0.005	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Pb	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Sb	0.001	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Se	0.002	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Sn	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Sr	0.000	1	97.16	3/21/2014	18:05	CCB		
ICB	Y	Ti	0.000	1	99.41	3/21/2014	18:06	CCB		
ICB	Y	Tl	0.000	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	V	0.001	1	99.41	3/21/2014	18:07	CCB		
ICB	Y	Zn	-0.003	1	99.41	3/21/2014	18:07	CCB		
Blank	N	Ag	0.000	1	99.31	3/21/2014	18:11	MISC		
Blank	N	Al	-0.044	1	96.87	3/21/2014	18:10	MISC		
Blank	N	As	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	B	0.015	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Ba	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Be	0.000	1	99.31	3/21/2014	18:11	MISC		
Blank	N	Ca	-0.006	1	96.87	3/21/2014	18:10	MISC		
Blank	N	Cd	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Co	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Cr	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Cu	0.001	1	99.31	3/21/2014	18:11	MISC		
Blank	N	Fe	0.000	1	96.87	3/21/2014	18:10	MISC		
Blank	N	K	-0.001	1	96.87	3/21/2014	18:10	MISC		
Blank	N	Li	-0.005	1	99.31	3/21/2014	18:10	MISC		
Blank	N	Mg	-0.013	1	96.87	3/21/2014	18:10	MISC		
Blank	N	Mn	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Mo	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Na	0.023	1	96.87	3/21/2014	18:10	MISC		
Blank	N	Ni	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	P	-0.002	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Pb	0.000	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Sb	0.001	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Se	0.003	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Sn	-0.001	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Sr	0.000	1	96.87	3/21/2014	18:10	MISC		
Blank	N	Ti	0.000	1	99.31	3/21/2014	18:11	MISC		
Blank	N	Tl	-0.001	1	99.31	3/21/2014	18:12	MISC		
Blank	N	V	0.001	1	99.31	3/21/2014	18:12	MISC		
Blank	N	Zn	-0.003	1	99.31	3/21/2014	18:12	MISC		
MRL	Y	Ag	0.010	1	99.46	3/21/2014	18:16	MRL		
MRL	Y	Al	0.069	1	97.54	3/21/2014	18:15	MRL		MRL FL,
MRL	Y	As	0.009	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	B	0.062	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Ba	0.010	1	99.46	3/21/2014	18:17	MRL		

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
MRL	Y	Be	0.004	1	99.46	3/21/2014	18:16	MRL		
MRL	Y	Ca	0.099	1	97.54	3/21/2014	18:15	MRL		
MRL	Y	Cd	0.005	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Co	0.010	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Cr	0.010	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Cu	0.011	1	99.46	3/21/2014	18:16	MRL		
MRL	Y	Fe	0.106	1	97.54	3/21/2014	18:15	MRL		
MRL	Y	K	2.028	1	97.54	3/21/2014	18:15	MRL		
MRL	Y	Li	0.099	1	99.46	3/21/2014	18:15	MRL		
MRL	Y	Mg	0.096	1	97.54	3/21/2014	18:15	MRL		
MRL	Y	Mn	0.010	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Mo	0.010	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Na	0.546	1	97.54	3/21/2014	18:15	MRL		
MRL	Y	Ni	0.010	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	P	0.095	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Pb	0.010	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Sb	0.011	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Se	0.012	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Sn	0.040	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Sr	0.011	1	97.54	3/21/2014	18:15	MRL		
MRL	Y	Ti	0.050	1	99.46	3/21/2014	18:16	MRL		
MRL	Y	Tl	0.010	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	V	0.019	1	99.46	3/21/2014	18:17	MRL		
MRL	Y	Zn	0.017	1	99.46	3/21/2014	18:17	MRL		
ICSA	Y	Ag	-0.005	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Al	753.100	1	92.14	3/21/2014	18:19	ICS-A		
ICSA	Y	As	-0.001	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	B	0.053	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Ba	-0.001	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Be	0.002	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Ca	703.600	1	92.14	3/21/2014	18:19	ICS-A		
ICSA	Y	Cd	0.008	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Co	0.016	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Cr	-0.003	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Cu	0.002	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Fe	668.200	1	92.14	3/21/2014	18:19	ICS-A		
ICSA	Y	K	0.192	1	92.14	3/21/2014	18:19	ICS-A		
ICSA	Y	Li	-0.006	1	86.49	3/21/2014	18:19	ICS-A		
ICSA	Y	Mg	697.800	1	92.14	3/21/2014	18:19	ICS-A		
ICSA	Y	Mn	-0.012	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Mo	0.013	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Na	0.034	1	92.14	3/21/2014	18:19	ICS-A		
ICSA	Y	Ni	0.016	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	P	-0.014	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Pb	-0.006	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Sb	-0.017	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Se	0.000	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Sn	0.034	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Sr	-0.002	1	92.14	3/21/2014	18:19	ICS-A		
ICSA	Y	Ti	0.003	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Tl	-0.001	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	V	-0.010	1	86.49	3/21/2014	18:20	ICS-A		
ICSA	Y	Zn	0.026	1	86.49	3/21/2014	18:20	ICS-A		
ICSAB	Y	Ag	0.209	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Al	766.500	1	93.11	3/21/2014	18:27	ICS-AB		
ICSAB	Y	As	0.216	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	B	1.033	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Ba	0.190	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Be	0.082	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Ca	694.100	1	93.11	3/21/2014	18:27	ICS-AB		
ICSAB	Y	Cd	0.114	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Co	0.203	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Cr	0.192	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Cu	0.213	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Fe	677.100	1	93.11	3/21/2014	18:27	ICS-AB		
ICSAB	Y	K	46.010	1	93.11	3/21/2014	18:27	ICS-AB		
ICSAB	Y	Li	2.246	1	86.05	3/21/2014	18:27	ICS-AB		
ICSAB	Y	Mg	703.700	1	93.11	3/21/2014	18:27	ICS-AB		
ICSAB	Y	Mn	0.186	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Mo	0.209	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Na	11.210	1	93.11	3/21/2014	18:27	ICS-AB		
ICSAB	Y	Ni	0.202	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	P	2.057	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Pb	0.177	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Sb	0.197	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Se	0.207	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Sn	0.797	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Sr	0.205	1	93.11	3/21/2014	18:27	ICS-AB		
ICSAB	Y	Ti	1.029	1	86.05	3/21/2014	18:28	ICS-AB		

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
ICSAB	Y	Tl	0.190	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	V	0.393	1	86.05	3/21/2014	18:28	ICS-AB		
ICSAB	Y	Zn	0.387	1	86.05	3/21/2014	18:28	ICS-AB		
CCV	Y	Ag	0.496	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Al	4.980	1	98.25	3/21/2014	18:35	CCV		
CCV	Y	As	0.500	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	B	2.434	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Ba	0.499	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Be	0.201	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Ca	5.053	1	98.25	3/21/2014	18:35	CCV		
CCV	Y	Cd	0.248	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Co	0.494	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Cr	0.496	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Cu	0.494	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Fe	5.081	1	98.25	3/21/2014	18:35	CCV		
CCV	Y	K	99.770	1	98.25	3/21/2014	18:35	CCV		
CCV	Y	Li	4.969	1	96.15	3/21/2014	18:35	CCV		
CCV	Y	Mg	5.082	1	98.25	3/21/2014	18:35	CCV		
CCV	Y	Mn	0.501	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Mo	0.502	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Na	25.120	1	98.25	3/21/2014	18:35	CCV		
CCV	Y	Ni	0.505	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	P	4.992	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Pb	0.498	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Sb	0.498	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Se	0.502	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Sn	2.024	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Sr	0.501	1	98.25	3/21/2014	18:35	CCV		
CCV	Y	Ti	2.519	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Tl	0.499	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	V	0.997	1	96.15	3/21/2014	18:36	CCV		
CCV	Y	Zn	1.007	1	96.15	3/21/2014	18:36	CCV		
CCB	Y	Ag	0.001	1	98.34	3/21/2014	18:40	CCB		
CCB	Y	Al	-0.054	1	96.45	3/21/2014	18:39	CCB		
CCB	Y	As	-0.001	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	B	0.014	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Ba	0.000	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Be	0.000	1	98.34	3/21/2014	18:40	CCB		
CCB	Y	Ca	-0.005	1	96.45	3/21/2014	18:39	CCB		
CCB	Y	Cd	0.000	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Co	0.000	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Cr	0.000	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Cu	0.000	1	98.34	3/21/2014	18:40	CCB		
CCB	Y	Fe	0.002	1	96.45	3/21/2014	18:39	CCB		
CCB	Y	K	0.006	1	96.45	3/21/2014	18:39	CCB		
CCB	Y	Li	-0.005	1	98.34	3/21/2014	18:39	CCB		
CCB	Y	Mg	-0.017	1	96.45	3/21/2014	18:39	CCB		
CCB	Y	Mn	0.000	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Mo	0.001	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Na	0.021	1	96.45	3/21/2014	18:39	CCB		
CCB	Y	Ni	0.000	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	P	-0.007	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Pb	-0.001	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Sb	0.001	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Se	0.003	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Sn	-0.002	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Sr	0.000	1	96.45	3/21/2014	18:39	CCB		
CCB	Y	Ti	0.000	1	98.34	3/21/2014	18:40	CCB		
CCB	Y	Tl	0.000	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	V	0.001	1	98.34	3/21/2014	18:41	CCB		
CCB	Y	Zn	-0.003	1	98.34	3/21/2014	18:41	CCB		
T1400360-002 2x	Y	Ag	0.023	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Al	70.930	2	91.67	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	As	0.069	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	B	0.151	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Ba	0.084	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Be	0.005	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Ca	3041.000	2	91.67	3/21/2014	18:43	SAMP	6010 S	
T1400360-002 2x	Y	Cd	0.004	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Co	0.029	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Cr	0.302	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Cu	0.145	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Fe	128.900	2	91.67	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	K	24.600	2	91.67	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Li	0.156	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Mg	24.270	2	91.67	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Mn	1.875	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Mo	0.017	2	87.06	3/21/2014	18:44	SAMP	6010 S	
T1400360-002 2x	Y	Na	5.076	2	91.67	3/21/2014	18:44	SAMP	6010 S	

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402003-003	Y	Sn	-0.003	1	101.1	3/21/2014	19:35	SAMP	200.7 W	
J1402003-003	Y	Sr	0.005	1	98.78	3/21/2014	19:33	SAMP	200.7 W	
J1402003-003	Y	Ti	0.272	1	101.1	3/21/2014	19:34	SAMP	200.7 W	
J1402003-003	Y	Tl	-0.001	1	101.1	3/21/2014	19:35	SAMP	200.7 W	
J1402003-003	Y	V	0.005	1	101.1	3/21/2014	19:35	SAMP	200.7 W	
J1402003-003	Y	Zn	0.007	1	101.1	3/21/2014	19:35	SAMP	200.7 W	
J1402003-004	Y	Ag	0.000	1	101.9	3/21/2014	19:39	SAMP	200.7 W	
J1402003-004	Y	Al	0.198	1	99.98	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	As	0.000	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	B	0.017	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Ba	0.009	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Be	0.000	1	101.9	3/21/2014	19:39	SAMP	200.7 W	
J1402003-004	Y	Ca	0.326	1	99.98	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	Cd	0.000	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Co	0.001	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Cr	0.006	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Cu	0.001	1	101.9	3/21/2014	19:39	SAMP	200.7 W	
J1402003-004	Y	Fe	0.071	1	99.98	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	K	0.045	1	99.98	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	Li	-0.005	1	101.9	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	Mg	0.346	1	99.98	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	Mn	0.009	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Mo	0.000	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Na	1.709	1	99.98	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	Ni	0.000	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	P	0.005	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Pb	-0.001	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Sb	0.001	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Se	0.004	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Sn	-0.002	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Sr	0.005	1	99.98	3/21/2014	19:38	SAMP	200.7 W	
J1402003-004	Y	Ti	0.001	1	101.9	3/21/2014	19:39	SAMP	200.7 W	
J1402003-004	Y	Tl	0.000	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	V	0.001	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
J1402003-004	Y	Zn	0.002	1	101.9	3/21/2014	19:40	SAMP	200.7 W	
CCV	Y	Ag	0.488	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Al	4.897	1	98.06	3/21/2014	19:42	CCV		
CCV	Y	As	0.500	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	B	2.418	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Ba	0.490	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Be	0.196	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Ca	4.947	1	98.06	3/21/2014	19:42	CCV		
CCV	Y	Cd	0.247	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Co	0.490	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Cr	0.493	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Cu	0.485	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Fe	4.975	1	98.06	3/21/2014	19:42	CCV		
CCV	Y	K	100.200	1	98.06	3/21/2014	19:42	CCV		
CCV	Y	Li	4.975	1	96.64	3/21/2014	19:42	CCV		
CCV	Y	Mg	4.980	1	98.06	3/21/2014	19:42	CCV		
CCV	Y	Mn	0.489	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Mo	0.499	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Na	25.220	1	98.06	3/21/2014	19:42	CCV		
CCV	Y	Ni	0.502	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	P	4.955	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Pb	0.498	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Sb	0.501	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Se	0.498	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Sn	2.014	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Sr	0.501	1	98.06	3/21/2014	19:42	CCV		
CCV	Y	Ti	2.446	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Tl	0.494	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	V	0.974	1	96.64	3/21/2014	19:43	CCV		
CCV	Y	Zn	0.988	1	96.64	3/21/2014	19:43	CCV		
CCB	Y	Ag	0.000	1	98.34	3/21/2014	19:47	CCB		
CCB	Y	Al	-0.062	1	95.45	3/21/2014	19:46	CCB		
CCB	Y	As	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	B	0.011	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Ba	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Be	0.000	1	98.34	3/21/2014	19:47	CCB		
CCB	Y	Ca	-0.004	1	95.45	3/21/2014	19:46	CCB		
CCB	Y	Cd	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Co	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Cr	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Cu	0.000	1	98.34	3/21/2014	19:47	CCB		
CCB	Y	Fe	0.001	1	95.45	3/21/2014	19:46	CCB		
CCB	Y	K	0.043	1	95.45	3/21/2014	19:46	CCB		
CCB	Y	Li	-0.005	1	98.34	3/21/2014	19:46	CCB		
CCB	Y	Mg	-0.027	1	95.45	3/21/2014	19:46	CCB		

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
CCB	Y	Mn	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Mo	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Na	0.036	1	95.45	3/21/2014	19:46	CCB		
CCB	Y	Ni	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	P	-0.007	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Pb	-0.001	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Sb	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Se	0.002	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Sn	-0.003	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Sr	0.000	1	95.45	3/21/2014	19:46	CCB		
CCB	Y	Ti	0.000	1	98.34	3/21/2014	19:47	CCB		
CCB	Y	Tl	0.000	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	V	0.001	1	98.34	3/21/2014	19:48	CCB		
CCB	Y	Zn	-0.003	1	98.34	3/21/2014	19:48	CCB		
J1402005-001	Y	Ag	0.001	1	98.12	3/21/2014	19:52	SAMP	200.7 W	
J1402005-001	Y	Al	0.129	1	100.6	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	As	0.004	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	B	0.169	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Ba	0.011	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Be	0.000	1	98.12	3/21/2014	19:52	SAMP	200.7 W	
J1402005-001	Y	Ca	65.910	1	100.6	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	Cd	0.000	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Co	0.000	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Cr	0.000	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Cu	0.006	1	98.12	3/21/2014	19:52	SAMP	200.7 W	
J1402005-001	Y	Fe	0.092	1	100.6	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	K	9.972	1	100.6	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	Li	-0.002	1	98.12	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	Mg	21.920	1	100.6	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	Mn	0.017	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Mo	0.002	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Na	72.370	1	100.6	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	Ni	0.001	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	P	0.834	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Pb	-0.005	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Sb	0.001	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Se	0.001	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Sn	0.013	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	Sr	1.313	1	100.6	3/21/2014	19:51	SAMP	200.7 W	
J1402005-001	Y	Ti	0.001	1	98.12	3/21/2014	19:52	SAMP	200.7 W	
J1402005-001	Y	Tl	0.001	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-001	Y	V	0.006	1	98.12	3/21/2014	19:52	SAMP	200.7 W	
J1402005-001	Y	Zn	0.040	1	98.12	3/21/2014	19:53	SAMP	200.7 W	
J1402005-004	Y	Ag	0.001	1	100.3	3/21/2014	19:56	SAMP	200.7 W	
J1402005-004	Y	Al	0.648	1	101.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	As	0.006	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	B	0.141	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Ba	0.039	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Be	0.000	1	100.3	3/21/2014	19:56	SAMP	200.7 W	
J1402005-004	Y	Ca	66.420	1	101.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	Cd	0.000	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Co	0.001	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Cr	0.003	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Cu	0.034	1	100.3	3/21/2014	19:56	SAMP	200.7 W	
J1402005-004	Y	Fe	1.100	1	101.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	K	8.958	1	101.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	Li	-0.002	1	100.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	Mg	19.230	1	101.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	Mn	0.020	1	100.3	3/21/2014	19:56	SAMP	200.7 W	
J1402005-004	Y	Mo	0.003	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Na	59.050	1	101.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	Ni	0.003	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	P	4.181	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Pb	-0.001	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Sb	0.000	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Se	0.002	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Sn	0.016	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	Sr	1.094	1	101.3	3/21/2014	19:55	SAMP	200.7 W	
J1402005-004	Y	Ti	0.014	1	100.3	3/21/2014	19:56	SAMP	200.7 W	
J1402005-004	Y	Tl	0.000	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402005-004	Y	V	0.007	1	100.3	3/21/2014	19:56	SAMP	200.7 W	
J1402005-004	Y	Zn	0.124	1	100.3	3/21/2014	19:57	SAMP	200.7 W	
J1402022-001	Y	Ag	0.001	1	99.42	3/21/2014	20:01	SAMP	6010 W	
J1402022-001	Y	Al	0.305	1	98.09	3/21/2014	20:00	SAMP	6010 W	
J1402022-001	Y	As	0.015	1	99.42	3/21/2014	20:01	SAMP	6010 W	
J1402022-001	Y	B	0.039	1	99.42	3/21/2014	20:01	SAMP	6010 W	
J1402022-001	Y	Ba	0.094	1	99.42	3/21/2014	20:01	SAMP	6010 W	
J1402022-001	Y	Be	0.000	1	99.42	3/21/2014	20:01	SAMP	6010 W	
J1402022-001	Y	Ca	66.010	1	98.09	3/21/2014	20:00	SAMP	6010 W	

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402022-003	Y	Zn	0.053	1	100.2	3/21/2014	20:11	SAMP	6010 W	
J1402022-004	Y	Ag	0.001	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Al	1.052	1	101.8	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	As	0.006	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	B	0.340	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Ba	0.052	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Be	0.000	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Ca	54.020	1	101.8	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	Cd	0.000	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Co	0.001	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Cr	0.001	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Cu	0.003	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Fe	0.793	1	101.8	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	K	12.100	1	101.8	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	Li	-0.005	1	98.62	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	Mg	12.670	1	101.8	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	Mn	0.031	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Mo	0.005	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Na	71.960	1	101.8	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	Ni	0.006	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	P	0.160	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Pb	-0.002	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Sb	-0.001	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Se	0.000	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Sn	0.012	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Sr	0.914	1	101.8	3/21/2014	20:15	SAMP	6010 W	
J1402022-004	Y	Ti	0.011	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Tl	0.002	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	V	0.062	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-004	Y	Zn	0.028	1	98.62	3/21/2014	20:16	SAMP	6010 W	
J1402022-005	Y	Ag	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Al	0.021	1	100.4	3/21/2014	20:20	SAMP	6010 W	
J1402022-005	Y	As	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	B	0.007	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Ba	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Be	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Ca	-0.001	1	100.4	3/21/2014	20:20	SAMP	6010 W	
J1402022-005	Y	Cd	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Co	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Cr	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Cu	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Fe	0.000	1	100.4	3/21/2014	20:20	SAMP	6010 W	
J1402022-005	Y	K	-0.001	1	100.4	3/21/2014	20:19	SAMP	6010 W	
J1402022-005	Y	Li	-0.005	1	101.1	3/21/2014	20:19	SAMP	6010 W	
J1402022-005	Y	Mg	0.001	1	100.4	3/21/2014	20:20	SAMP	6010 W	
J1402022-005	Y	Mn	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Mo	-0.001	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Na	0.020	1	100.4	3/21/2014	20:19	SAMP	6010 W	
J1402022-005	Y	Ni	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	P	-0.001	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Pb	-0.001	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Sb	-0.001	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Se	0.003	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Sn	-0.002	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Sr	0.000	1	100.4	3/21/2014	20:19	SAMP	6010 W	
J1402022-005	Y	Ti	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Tl	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	V	0.001	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402022-005	Y	Zn	0.000	1	101.1	3/21/2014	20:21	SAMP	6010 W	
J1402025-001	Y	Ag	0.001	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Al	0.192	1	98.96	3/21/2014	20:25	SAMP	6010 W	
J1402025-001	Y	As	0.002	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	B	0.021	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Ba	0.013	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Be	0.000	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Ca	51.710	1	98.96	3/21/2014	20:24	SAMP	6010 W	
J1402025-001	Y	Cd	0.000	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Co	0.001	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Cr	0.004	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Cu	0.002	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Fe	0.265	1	98.96	3/21/2014	20:25	SAMP	6010 W	
J1402025-001	Y	K	1.388	1	98.96	3/21/2014	20:24	SAMP	6010 W	
J1402025-001	Y	Li	-0.004	1	99.75	3/21/2014	20:24	SAMP	6010 W	
J1402025-001	Y	Mg	1.571	1	98.96	3/21/2014	20:25	SAMP	6010 W	
J1402025-001	Y	Mn	0.001	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Mo	0.005	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Na	1.613	1	98.96	3/21/2014	20:24	SAMP	6010 W	
J1402025-001	Y	Ni	0.000	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	P	0.011	1	99.75	3/21/2014	20:26	SAMP	6010 W	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-001	Y	Pb	-0.005	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Sb	0.001	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Se	0.002	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Sn	0.012	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Sr	0.142	1	98.96	3/21/2014	20:24	SAMP	6010 W	
J1402025-001	Y	Ti	0.006	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Tl	0.001	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	V	0.005	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-001	Y	Zn	0.000	1	99.75	3/21/2014	20:26	SAMP	6010 W	
J1402025-002	Y	Ag	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Al	0.096	1	98.1	3/21/2014	20:30	SAMP	6010 W	
J1402025-002	Y	As	0.003	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	B	0.026	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Ba	0.009	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Be	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Ca	31.290	1	98.1	3/21/2014	20:29	SAMP	6010 W	
J1402025-002	Y	Cd	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Co	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Cr	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Cu	0.001	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Fe	0.909	1	98.1	3/21/2014	20:30	SAMP	6010 W	
J1402025-002	Y	K	0.952	1	98.1	3/21/2014	20:29	SAMP	6010 W	
J1402025-002	Y	Li	-0.003	1	99.53	3/21/2014	20:29	SAMP	6010 W	
J1402025-002	Y	Mg	15.340	1	98.1	3/21/2014	20:30	SAMP	6010 W	
J1402025-002	Y	Mn	0.027	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Mo	0.004	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Na	6.739	1	98.1	3/21/2014	20:29	SAMP	6010 W	
J1402025-002	Y	Ni	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	P	0.068	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Pb	-0.003	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Sb	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Se	0.003	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Sn	0.008	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Sr	0.051	1	98.1	3/21/2014	20:29	SAMP	6010 W	
J1402025-002	Y	Ti	0.001	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Tl	0.001	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	V	0.003	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-002	Y	Zn	0.000	1	99.53	3/21/2014	20:31	SAMP	6010 W	
J1402025-003	Y	Ag	0.001	1	99.22	3/21/2014	20:35	SAMP	6010 W	
J1402025-003	Y	Al	0.068	1	98.56	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	As	0.003	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	B	0.018	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Ba	0.000	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Be	0.000	1	99.22	3/21/2014	20:35	SAMP	6010 W	
J1402025-003	Y	Ca	23.420	1	98.56	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	Cd	0.000	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Co	0.000	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Cr	0.000	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Cu	0.001	1	99.22	3/21/2014	20:35	SAMP	6010 W	
J1402025-003	Y	Fe	0.830	1	98.56	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	K	1.024	1	98.56	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	Li	-0.004	1	99.22	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	Mg	10.290	1	98.56	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	Mn	0.025	1	99.22	3/21/2014	20:35	SAMP	6010 W	
J1402025-003	Y	Mo	0.007	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Na	5.416	1	98.56	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	Ni	0.000	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	P	0.213	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Pb	-0.004	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Sb	0.000	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Se	0.001	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Sn	0.005	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	Sr	0.034	1	98.56	3/21/2014	20:34	SAMP	6010 W	
J1402025-003	Y	Ti	0.001	1	99.22	3/21/2014	20:35	SAMP	6010 W	
J1402025-003	Y	Tl	0.000	1	99.22	3/21/2014	20:36	SAMP	6010 W	
J1402025-003	Y	V	0.003	1	99.22	3/21/2014	20:35	SAMP	6010 W	
J1402025-003	Y	Zn	0.002	1	99.22	3/21/2014	20:36	SAMP	6010 W	
CCV	Y	Ag	0.490	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Al	4.887	1	97.55	3/21/2014	20:38	CCV		
CCV	Y	As	0.509	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	B	2.440	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Ba	0.493	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Be	0.197	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Ca	4.972	1	97.55	3/21/2014	20:38	CCV		
CCV	Y	Cd	0.250	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Co	0.496	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Cr	0.499	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Cu	0.488	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Fe	4.982	1	97.55	3/21/2014	20:38	CCV		

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
CCV	Y	K	100.400	1	97.55	3/21/2014	20:38	CCV		
CCV	Y	Li	4.982	1	95.82	3/21/2014	20:38	CCV		
CCV	Y	Mg	4.987	1	97.55	3/21/2014	20:38	CCV		
CCV	Y	Mn	0.493	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Mo	0.505	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Na	25.250	1	97.55	3/21/2014	20:38	CCV		
CCV	Y	Ni	0.508	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	P	5.017	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Pb	0.498	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Sb	0.508	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Se	0.503	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Sn	2.035	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Sr	0.501	1	97.55	3/21/2014	20:38	CCV		
CCV	Y	Ti	2.460	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Tl	0.499	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	V	0.980	1	95.82	3/21/2014	20:39	CCV		
CCV	Y	Zn	0.994	1	95.82	3/21/2014	20:39	CCV		
CCB	Y	Ag	0.001	1	98.39	3/21/2014	20:43	CCB		
CCB	Y	Al	-0.072	1	95.46	3/21/2014	20:42	CCB		
CCB	Y	As	-0.001	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	B	0.005	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Ba	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Be	0.000	1	98.39	3/21/2014	20:43	CCB		
CCB	Y	Ca	-0.002	1	95.46	3/21/2014	20:42	CCB		
CCB	Y	Cd	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Co	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Cr	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Cu	0.001	1	98.39	3/21/2014	20:43	CCB		
CCB	Y	Fe	0.001	1	95.46	3/21/2014	20:42	CCB		
CCB	Y	K	0.065	1	95.46	3/21/2014	20:42	CCB		
CCB	Y	Li	-0.005	1	98.39	3/21/2014	20:42	CCB		
CCB	Y	Mg	-0.013	1	95.46	3/21/2014	20:42	CCB		
CCB	Y	Mn	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Mo	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Na	0.028	1	95.46	3/21/2014	20:42	CCB		
CCB	Y	Ni	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	P	-0.007	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Pb	-0.001	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Sb	0.000	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Se	0.003	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Sn	-0.002	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Sr	0.000	1	95.46	3/21/2014	20:42	CCB		
CCB	Y	Ti	0.000	1	98.39	3/21/2014	20:43	CCB		
CCB	Y	Tl	-0.001	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	V	0.001	1	98.39	3/21/2014	20:44	CCB		
CCB	Y	Zn	-0.003	1	98.39	3/21/2014	20:44	CCB		
J1402025-004	Y	Ag	0.001	1	99.45	3/21/2014	20:48	SAMP	6010 W	
J1402025-004	Y	Al	0.039	1	98.56	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	As	0.005	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	B	0.134	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Ba	0.009	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Be	0.000	1	99.45	3/21/2014	20:48	SAMP	6010 W	
J1402025-004	Y	Ca	23.590	1	98.56	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	Cd	0.000	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Co	0.000	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Cr	0.000	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Cu	0.002	1	99.45	3/21/2014	20:48	SAMP	6010 W	
J1402025-004	Y	Fe	0.287	1	98.56	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	K	25.350	1	98.56	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	Li	-0.005	1	99.45	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	Mg	7.927	1	98.56	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	Mn	0.059	1	99.45	3/21/2014	20:48	SAMP	6010 W	
J1402025-004	Y	Mo	0.001	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Na	17.140	1	98.56	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	Ni	0.000	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	P	0.015	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Pb	-0.003	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Sb	-0.001	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Se	0.004	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Sn	0.008	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	Sr	0.194	1	98.56	3/21/2014	20:47	SAMP	6010 W	
J1402025-004	Y	Ti	0.000	1	99.45	3/21/2014	20:48	SAMP	6010 W	
J1402025-004	Y	Tl	0.000	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-004	Y	V	0.004	1	99.45	3/21/2014	20:48	SAMP	6010 W	
J1402025-004	Y	Zn	0.001	1	99.45	3/21/2014	20:49	SAMP	6010 W	
J1402025-005	Y	Ag	0.000	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Al	0.304	1	99.55	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	As	0.002	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	B	0.026	1	100	3/21/2014	20:53	SAMP	6010 W	

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-005	Y	Ba	0.009	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Be	0.000	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Ca	31.600	1	99.55	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	Cd	0.000	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Co	0.001	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Cr	0.000	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Cu	0.001	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Fe	0.999	1	99.55	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	K	0.946	1	99.55	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	Li	-0.003	1	100	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	Mg	15.330	1	99.55	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	Mn	0.027	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Mo	0.003	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Na	6.639	1	99.55	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	Ni	0.000	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	P	0.103	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Pb	-0.004	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Sb	0.000	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Se	0.001	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Sn	0.008	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Sr	0.052	1	99.55	3/21/2014	20:52	SAMP	6010 W	
J1402025-005	Y	Ti	0.003	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Tl	0.001	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	V	0.004	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-005	Y	Zn	0.001	1	100	3/21/2014	20:53	SAMP	6010 W	
J1402025-006	Y	Ag	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Al	0.478	1	99.14	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	As	0.002	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	B	0.014	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Ba	0.052	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Be	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Ca	14.940	1	99.14	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	Cd	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Co	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Cr	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Cu	0.002	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Fe	0.018	1	99.14	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	K	3.932	1	99.14	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	Li	0.002	1	99.66	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	Mg	2.883	1	99.14	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	Mn	0.001	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Mo	0.008	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Na	10.950	1	99.14	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	Ni	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	P	0.004	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Pb	-0.004	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Sb	0.001	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Se	0.003	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Sn	0.005	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Sr	0.322	1	99.14	3/21/2014	20:57	SAMP	6010 W	
J1402025-006	Y	Ti	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Tl	0.001	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	V	0.002	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-006	Y	Zn	0.000	1	99.66	3/21/2014	20:58	SAMP	6010 W	
J1402025-007	Y	Ag	0.001	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Al	0.165	1	99.74	3/21/2014	21:02	SAMP	6010 W	
J1402025-007	Y	As	0.003	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	B	0.021	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Ba	0.026	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Be	0.000	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Ca	43.790	1	99.74	3/21/2014	21:02	SAMP	6010 W	
J1402025-007	Y	Cd	0.015	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Co	0.001	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Cr	0.095	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Cu	0.005	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Fe	0.927	1	99.74	3/21/2014	21:02	SAMP	6010 W	
J1402025-007	Y	K	5.433	1	99.74	3/21/2014	21:02	SAMP	6010 W	
J1402025-007	Y	Li	0.006	1	99.41	3/21/2014	21:02	SAMP	6010 W	
J1402025-007	Y	Mg	2.137	1	99.74	3/21/2014	21:02	SAMP	6010 W	
J1402025-007	Y	Mn	0.020	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Mo	0.005	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Na	2.809	1	99.74	3/21/2014	21:02	SAMP	6010 W	
J1402025-007	Y	Ni	0.088	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	P	0.176	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Pb	-0.005	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Sb	0.001	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Se	0.002	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Sn	0.012	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Sr	0.268	1	99.74	3/21/2014	21:02	SAMP	6010 W	

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-007	Y	Ti	0.010	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Tl	-0.001	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	V	0.002	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007	Y	Zn	0.013	1	99.41	3/21/2014	21:03	SAMP	6010 W	
J1402025-007S	Y	Ag	0.515	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Al	5.381	1	99.19	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	As	0.519	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	B	2.537	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Ba	0.532	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Be	0.205	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Ca	49.560	1	99.19	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Cd	0.271	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Co	0.499	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Cr	0.601	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Cu	0.514	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Fe	6.095	1	99.19	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	K	108.700	1	99.19	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Li	5.129	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Mg	7.249	1	99.19	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Mn	0.524	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Mo	0.517	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Na	28.690	1	99.19	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Ni	0.600	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	P	5.368	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Pb	0.501	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Sb	0.518	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Se	0.520	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Sn	2.051	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Sr	0.785	1	99.19	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Ti	2.548	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Tl	0.509	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	V	1.013	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007S	Y	Zn	1.028	1	96.56	3/21/2014	21:06	MS	6010 W	
J1402025-007SD	Y	Ag	0.515	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Al	5.269	1	100.2	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	As	0.530	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	B	2.572	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Ba	0.531	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Be	0.205	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Ca	49.150	1	100.2	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Cd	0.273	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Co	0.505	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Cr	0.613	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Cu	0.513	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Fe	6.087	1	100.2	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	K	108.700	1	100.2	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Li	5.140	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Mg	7.179	1	100.2	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Mn	0.523	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Mo	0.525	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Na	28.750	1	100.2	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Ni	0.606	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	P	5.441	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Pb	0.507	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Sb	0.526	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Se	0.525	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Sn	2.078	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Sr	0.784	1	100.2	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Ti	2.544	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Tl	0.513	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	V	1.011	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007SD	Y	Zn	1.026	1	96.82	3/21/2014	21:09	MSD	6010 W	
J1402025-007L	Y	Ag	0.000	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Al	0.020	5	98.47	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	As	0.001	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	B	0.011	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Ba	0.005	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Be	0.000	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Ca	9.138	5	98.47	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	Cd	0.003	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Co	0.000	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Cr	0.023	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Cu	0.002	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Fe	0.229	5	98.47	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	K	1.180	5	98.47	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	Li	-0.002	5	99.3	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	Mg	0.436	5	98.47	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	Mn	0.004	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Mo	0.002	5	99.3	3/21/2014	21:14	SD	6010 W	

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-007L	Y	Na	0.592	5	98.47	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	Ni	0.018	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	P	0.034	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Pb	-0.002	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Sb	0.001	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Se	0.002	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Sn	0.003	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Sr	0.056	5	98.47	3/21/2014	21:13	SD	6010 W	
J1402025-007L	Y	Ti	0.002	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Tl	0.000	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	V	0.001	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007L	Y	Zn	0.002	5	99.3	3/21/2014	21:14	SD	6010 W	
J1402025-007A	Y	Ag	0.510	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Al	5.242	1	101.2	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	As	0.517	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	B	2.543	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Ba	0.528	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Be	0.205	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Ca	47.600	1	101.2	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Cd	0.269	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Co	0.499	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Cr	0.598	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Cu	0.514	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Fe	5.944	1	101.2	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	K	109.400	1	101.2	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Li	5.208	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Mg	7.021	1	101.2	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Mn	0.522	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Mo	0.513	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Na	28.800	1	101.2	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Ni	0.593	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	P	5.324	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Pb	0.498	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Sb	0.515	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Se	0.506	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Sn	2.032	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	Sr	0.784	1	101.2	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Ti	2.543	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Tl	0.507	1	97.85	3/21/2014	21:18	PS	6010 W	
J1402025-007A	Y	V	1.011	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402025-007A	Y	Zn	1.021	1	97.85	3/21/2014	21:17	PS	6010 W	
J1402037-001	Y	Ag	0.000	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Al	0.298	1	99.9	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	As	0.001	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	B	0.028	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Ba	0.006	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Be	0.000	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Ca	7.859	1	99.9	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	Cd	0.000	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Co	0.001	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Cr	0.001	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Cu	0.002	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Fe	0.026	1	99.9	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	K	6.617	1	99.9	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	Li	-0.004	1	99.5	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	Mg	2.596	1	99.9	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	Mn	0.090	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Mo	0.000	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Na	2.016	1	99.9	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	Ni	0.002	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	P	0.010	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Pb	-0.002	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Sb	0.000	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Se	0.003	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Sn	0.002	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Sr	0.010	1	99.9	3/21/2014	21:21	SAMP	6010 W	
J1402037-001	Y	Ti	0.002	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Tl	0.001	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	V	0.001	1	99.5	3/21/2014	21:22	SAMP	6010 W	
J1402037-001	Y	Zn	0.058	1	99.5	3/21/2014	21:22	SAMP	6010 W	
MB-02132-02	Y	Ag	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Al	0.035	1	100.1	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	As	-0.001	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	B	0.008	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Ba	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Be	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Ca	0.000	1	100.1	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	Cd	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Co	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
MB-02132-02	Y	Cr	0.002	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Cu	0.001	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Fe	0.017	1	100.1	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	K	-0.005	1	100.1	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	Li	-0.005	1	99.54	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	Mg	0.005	1	100.1	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	Mn	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Mo	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Na	0.002	1	100.1	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	Ni	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	P	0.003	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Pb	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Sb	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Se	0.003	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Sn	-0.002	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Sr	0.000	1	100.1	3/21/2014	21:26	MBLK	6010 W	
MB-02132-02	Y	Ti	0.000	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Tl	0.001	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	V	0.001	1	99.54	3/21/2014	21:27	MBLK	6010 W	
MB-02132-02	Y	Zn	0.001	1	99.54	3/21/2014	21:27	MBLK	6010 W	
CCV	Y	Ag	0.495	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Al	5.014	1	98.06	3/21/2014	21:30	CCV		
CCV	Y	As	0.493	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	B	2.415	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Ba	0.496	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Be	0.198	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Ca	5.027	1	98.06	3/21/2014	21:30	CCV		
CCV	Y	Cd	0.247	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Co	0.490	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Cr	0.494	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Cu	0.494	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Fe	5.064	1	98.06	3/21/2014	21:30	CCV		
CCV	Y	K	100.400	1	98.06	3/21/2014	21:30	CCV		
CCV	Y	Li	5.021	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Mg	5.018	1	98.06	3/21/2014	21:30	CCV		
CCV	Y	Mn	0.496	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Mo	0.501	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Na	25.320	1	98.06	3/21/2014	21:30	CCV		
CCV	Y	Ni	0.502	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	P	4.939	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Pb	0.493	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Sb	0.500	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Se	0.493	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Sn	2.007	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Sr	0.505	1	98.06	3/21/2014	21:30	CCV		
CCV	Y	Ti	2.485	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Tl	0.487	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	V	0.991	1	96.34	3/21/2014	21:30	CCV		
CCV	Y	Zn	0.994	1	96.34	3/21/2014	21:30	CCV		
CCB	Y	Ag	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Al	-0.028	1	96.56	3/21/2014	21:34	CCB		
CCB	Y	As	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	B	0.008	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Ba	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Be	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Ca	-0.003	1	96.56	3/21/2014	21:34	CCB		
CCB	Y	Cd	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Co	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Cr	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Cu	0.001	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Fe	0.001	1	96.56	3/21/2014	21:34	CCB		
CCB	Y	K	0.037	1	96.56	3/21/2014	21:34	CCB		
CCB	Y	Li	-0.005	1	99.1	3/21/2014	21:34	CCB		
CCB	Y	Mg	-0.012	1	96.56	3/21/2014	21:34	CCB		
CCB	Y	Mn	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Mo	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Na	0.018	1	96.56	3/21/2014	21:34	CCB		
CCB	Y	Ni	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	P	-0.002	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Pb	-0.001	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Sb	0.001	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Se	0.004	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Sn	-0.002	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Sr	0.000	1	96.56	3/21/2014	21:34	CCB		
CCB	Y	Ti	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Tl	0.000	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	V	0.001	1	99.1	3/21/2014	21:35	CCB		
CCB	Y	Zn	-0.003	1	99.1	3/21/2014	21:35	CCB		
LCS-02132-01	Y	Ag	0.507	1	97.37	3/21/2014	21:38	LCS	6010 W	

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
MB-02087-01	Y	Sb	0.000	1	97.32	3/21/2014	23:53	MBLK	6010 TCLP	
MB-02087-01	Y	Se	0.003	1	97.32	3/21/2014	23:53	MBLK	6010 TCLP	
MB-02087-01	Y	Sn	-0.001	1	97.32	3/21/2014	23:53	MBLK	6010 TCLP	
MB-02087-01	Y	Sr	0.000	1	98.45	3/21/2014	23:51	MBLK	6010 TCLP	
MB-02087-01	Y	Ti	0.000	1	97.32	3/21/2014	23:53	MBLK	6010 TCLP	
MB-02087-01	Y	Tl	0.003	1	97.32	3/21/2014	23:53	MBLK	6010 TCLP	
MB-02087-01	Y	V	0.002	1	97.32	3/21/2014	23:53	MBLK	6010 TCLP	
MB-02087-01	Y	Zn	0.000	1	97.32	3/21/2014	23:53	MBLK	6010 TCLP	
LCS-02087-02	Y	Ag	0.508	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Al	5.071	1	100.5	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	As	0.516	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	B	2.510	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Ba	0.499	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Be	0.201	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Ca	4.983	1	100.5	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Cd	0.255	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Co	0.496	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Cr	0.502	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Cu	0.503	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Fe	5.059	1	100.5	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	K	101.900	1	100.5	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Li	5.075	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Mg	4.947	1	100.5	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Mn	0.498	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Mo	0.507	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Na	164.900	1	100.5	3/21/2014	23:56	LCS	6010 TCLP	LCS FH 200.7 , LCS FH 6010 W , LCS FH 6010 S ,
LCS-02087-02	Y	Ni	0.507	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	P	5.126	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Pb	0.504	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Sb	0.521	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Se	0.520	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Sn	2.024	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Sr	0.512	1	100.5	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Ti	2.507	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Tl	0.500	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	V	1.001	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
LCS-02087-02	Y	Zn	1.003	1	95.76	3/21/2014	23:56	LCS	6010 TCLP	
CCV	Y	Ag	0.495	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Al	4.932	1	97.86	3/21/2014	23:59	CCV		
CCV	Y	As	0.504	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	B	2.447	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Ba	0.495	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Be	0.198	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Ca	4.937	1	97.86	3/21/2014	23:59	CCV		
CCV	Y	Cd	0.249	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Co	0.493	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Cr	0.496	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Cu	0.495	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Fe	4.954	1	97.86	3/21/2014	23:59	CCV		
CCV	Y	K	100.600	1	97.86	3/21/2014	23:59	CCV		
CCV	Y	Li	5.053	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Mg	4.903	1	97.86	3/21/2014	23:59	CCV		
CCV	Y	Mn	0.495	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Mo	0.505	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Na	25.380	1	97.86	3/21/2014	23:59	CCV		
CCV	Y	Ni	0.504	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	P	4.974	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Pb	0.495	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Sb	0.504	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Se	0.490	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Sn	2.017	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Sr	0.507	1	97.86	3/21/2014	23:59	CCV		
CCV	Y	Ti	2.484	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Tl	0.497	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	V	0.992	1	95.31	3/21/2014	23:59	CCV		
CCV	Y	Zn	0.986	1	95.31	3/21/2014	23:59	CCV		
CCB	Y	Ag	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Al	-0.012	1	96.87	3/22/2014	00:03	CCB		
CCB	Y	As	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	B	0.014	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Ba	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Be	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Ca	-0.003	1	96.87	3/22/2014	00:03	CCB		
CCB	Y	Cd	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Co	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Cr	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Cu	0.001	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Fe	-0.004	1	96.87	3/22/2014	00:03	CCB		
CCB	Y	K	0.081	1	96.87	3/22/2014	00:02	CCB		

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
CCB	Y	Li	-0.005	1	98.22	3/22/2014	00:02	CCB		
CCB	Y	Mg	-0.009	1	96.87	3/22/2014	00:03	CCB		
CCB	Y	Mn	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Mo	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Na	0.030	1	96.87	3/22/2014	00:02	CCB		
CCB	Y	Ni	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	P	0.003	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Pb	-0.001	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Sb	0.001	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Se	0.003	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Sn	-0.002	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Sr	0.000	1	96.87	3/22/2014	00:02	CCB		
CCB	Y	Ti	0.000	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Tl	0.001	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	V	0.001	1	98.22	3/22/2014	00:04	CCB		
CCB	Y	Zn	-0.003	1	98.22	3/22/2014	00:04	CCB		
J1401898-001	Y	Ag	0.000	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Al	0.069	1	99.43	3/22/2014	00:08	SAMP	6010 TCLP	
J1401898-001	Y	As	0.001	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	B	0.025	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Ba	0.008	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Be	0.000	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Ca	5.085	1	99.43	3/22/2014	00:07	SAMP	6010 TCLP	
J1401898-001	Y	Cd	0.004	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Co	0.002	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Cr	0.002	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Cu	0.010	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Fe	1.100	1	99.43	3/22/2014	00:08	SAMP	6010 TCLP	
J1401898-001	Y	K	1.276	1	99.43	3/22/2014	00:07	SAMP	6010 TCLP	
J1401898-001	Y	Li	-0.004	1	97.51	3/22/2014	00:07	SAMP	6010 TCLP	
J1401898-001	Y	Mg	1.795	1	99.43	3/22/2014	00:08	SAMP	6010 TCLP	
J1401898-001	Y	Mn	0.026	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Mo	0.001	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	N	Na	143.100	1	99.43	3/22/2014	00:07	SAMP	6010 TCLP	MB FH, LCS FH,
J1401898-001	Y	Ni	0.006	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	P	0.479	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Pb	0.000	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Sb	0.005	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Se	0.005	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Sn	0.003	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Sr	0.009	1	99.43	3/22/2014	00:07	SAMP	6010 TCLP	
J1401898-001	Y	Ti	0.000	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Tl	0.001	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	V	0.002	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
J1401898-001	Y	Zn	0.373	1	97.51	3/22/2014	00:09	SAMP	6010 TCLP	
T1400360-001	Y	Ag	0.000	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Al	0.208	1	99.79	3/22/2014	00:13	SAMP	6010 TCLP	
T1400360-001	Y	As	0.001	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	B	0.013	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Ba	0.010	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Be	0.000	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Ca	17.390	1	99.79	3/22/2014	00:13	SAMP	6010 TCLP	
T1400360-001	Y	Cd	0.000	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Co	0.008	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Cr	0.000	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Cu	0.010	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Fe	0.021	1	99.79	3/22/2014	00:13	SAMP	6010 TCLP	
T1400360-001	Y	K	0.379	1	99.79	3/22/2014	00:13	SAMP	6010 TCLP	
T1400360-001	Y	Li	0.001	1	96.51	3/22/2014	00:13	SAMP	6010 TCLP	
T1400360-001	Y	Mg	1.034	1	99.79	3/22/2014	00:13	SAMP	6010 TCLP	
T1400360-001	Y	Mn	0.149	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Mo	0.001	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	N	Na	136.400	1	99.79	3/22/2014	00:12	SAMP	6010 TCLP	MB FH, LCS FH,
T1400360-001	Y	Ni	0.013	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	P	-0.001	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Pb	-0.003	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Sb	0.000	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Se	0.004	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Sn	0.007	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Sr	0.067	1	99.79	3/22/2014	00:13	SAMP	6010 TCLP	
T1400360-001	Y	Ti	0.000	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Tl	0.001	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	V	0.002	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
T1400360-001	Y	Zn	0.016	1	96.51	3/22/2014	00:14	SAMP	6010 TCLP	
MB-02130-02	Y	Ag	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Al	0.080	1	101.9	3/22/2014	00:18	MBLK	6010 D	
MB-02130-02	Y	As	0.001	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	B	0.009	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Ba	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
MB-02130-02	Y	Be	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Ca	0.015	1	101.9	3/22/2014	00:18	MBLK	6010 D	
MB-02130-02	Y	Cd	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Co	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Cr	0.001	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Cu	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Fe	0.016	1	101.9	3/22/2014	00:18	MBLK	6010 D	
MB-02130-02	Y	K	0.052	1	101.9	3/22/2014	00:17	MBLK	6010 D	
MB-02130-02	Y	Li	-0.005	1	101.9	3/22/2014	00:17	MBLK	6010 D	
MB-02130-02	Y	Mg	0.004	1	101.9	3/22/2014	00:18	MBLK	6010 D	
MB-02130-02	Y	Mn	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Mo	-0.001	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Na	0.019	1	101.9	3/22/2014	00:17	MBLK	6010 D	
MB-02130-02	Y	Ni	-0.001	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	P	0.012	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Pb	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Sb	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Se	0.006	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Sn	-0.001	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Sr	0.000	1	101.9	3/22/2014	00:17	MBLK	6010 D	
MB-02130-02	Y	Ti	0.000	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Tl	0.001	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	V	0.001	1	101.9	3/22/2014	00:19	MBLK	6010 D	
MB-02130-02	Y	Zn	0.002	1	101.9	3/22/2014	00:19	MBLK	6010 D	
LCS-02130-01	Y	Ag	0.501	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Al	5.208	1	101.2	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	As	0.509	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	B	2.489	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Ba	0.494	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Be	0.199	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Ca	5.045	1	101.2	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Cd	0.253	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Co	0.498	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Cr	0.501	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Cu	0.498	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Fe	5.048	1	101.2	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	K	101.500	1	101.2	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Li	5.129	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Mg	5.008	1	101.2	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Mn	0.494	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Mo	0.506	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Na	25.590	1	101.2	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Ni	0.509	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	P	5.067	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Pb	0.501	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Sb	0.508	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Se	0.511	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Sn	2.024	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Sr	0.517	1	101.2	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Ti	2.484	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Tl	0.505	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	V	0.988	1	97.51	3/22/2014	00:22	LCS	6010 D	
LCS-02130-01	Y	Zn	0.986	1	97.51	3/22/2014	00:22	LCS	6010 D	
J1402025-001	Y	Ag	0.001	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Al	0.112	1	101.5	3/22/2014	00:26	SAMP	6010 D	
J1402025-001	Y	As	0.002	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	B	0.028	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Ba	0.013	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Be	0.000	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Ca	49.960	1	101.5	3/22/2014	00:25	SAMP	6010 D	
J1402025-001	Y	Cd	0.000	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Co	0.000	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Cr	0.000	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Cu	0.001	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Fe	0.000	1	101.5	3/22/2014	00:26	SAMP	6010 D	
J1402025-001	Y	K	1.395	1	101.5	3/22/2014	00:25	SAMP	6010 D	
J1402025-001	Y	Li	-0.005	1	99.87	3/22/2014	00:25	SAMP	6010 D	
J1402025-001	Y	Mg	1.511	1	101.5	3/22/2014	00:26	SAMP	6010 D	
J1402025-001	Y	Mn	0.000	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Mo	0.004	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Na	1.593	1	101.5	3/22/2014	00:25	SAMP	6010 D	
J1402025-001	Y	Ni	0.000	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	P	0.012	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Pb	-0.005	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Sb	0.002	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Se	0.004	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Sn	0.012	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Sr	0.140	1	101.5	3/22/2014	00:25	SAMP	6010 D	
J1402025-001	Y	Ti	0.000	1	99.87	3/22/2014	00:27	SAMP	6010 D	

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-001	Y	Tl	0.001	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	V	0.004	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-001	Y	Zn	0.002	1	99.87	3/22/2014	00:27	SAMP	6010 D	
J1402025-002	Y	Ag	0.000	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Al	0.110	1	101.5	3/22/2014	00:31	SAMP	6010 D	
J1402025-002	Y	As	0.002	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	B	0.030	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Ba	0.009	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Be	0.000	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Ca	30.860	1	101.5	3/22/2014	00:30	SAMP	6010 D	
J1402025-002	Y	Cd	0.000	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Co	0.000	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Cr	-0.001	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Cu	0.001	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Fe	0.753	1	101.5	3/22/2014	00:31	SAMP	6010 D	
J1402025-002	Y	K	0.943	1	101.5	3/22/2014	00:30	SAMP	6010 D	
J1402025-002	Y	Li	-0.004	1	100.3	3/22/2014	00:30	SAMP	6010 D	
J1402025-002	Y	Mg	14.720	1	101.5	3/22/2014	00:31	SAMP	6010 D	
J1402025-002	Y	Mn	0.026	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Mo	0.003	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Na	6.772	1	101.5	3/22/2014	00:30	SAMP	6010 D	
J1402025-002	Y	Ni	0.000	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	P	0.051	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Pb	-0.004	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Sb	-0.001	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Se	0.000	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Sn	0.009	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Sr	0.052	1	101.5	3/22/2014	00:30	SAMP	6010 D	
J1402025-002	Y	Ti	0.000	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Tl	0.002	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	V	0.003	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002	Y	Zn	0.002	1	100.3	3/22/2014	00:32	SAMP	6010 D	
J1402025-002S	Y	Ag	0.510	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Al	5.226	1	101.5	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	As	0.514	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	B	2.534	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Ba	0.507	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Be	0.202	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Ca	35.360	1	101.5	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Cd	0.255	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Co	0.497	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Cr	0.502	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Cu	0.504	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Fe	5.802	1	101.5	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	K	103.200	1	101.5	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Li	5.131	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Mg	19.720	1	101.5	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Mn	0.523	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Mo	0.512	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Na	32.150	1	101.5	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Ni	0.506	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	P	5.129	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Pb	0.498	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Sb	0.512	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Se	0.513	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Sn	2.029	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Sr	0.569	1	101.5	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Ti	2.514	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Tl	0.504	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	V	1.004	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002S	Y	Zn	0.987	1	96.75	3/22/2014	00:35	MS	6010 D	
J1402025-002SD	Y	Ag	0.513	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Al	5.103	1	101.5	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	As	0.518	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	B	2.568	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Ba	0.510	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Be	0.204	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Ca	35.270	1	101.5	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Cd	0.256	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Co	0.499	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Cr	0.506	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Cu	0.509	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Fe	5.716	1	101.5	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	K	103.200	1	101.5	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Li	5.152	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Mg	19.320	1	101.5	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Mn	0.527	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Mo	0.514	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Na	32.220	1	101.5	3/22/2014	00:38	MSD	6010 D	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-002SD	Y	Ni	0.508	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	P	5.198	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Pb	0.501	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Sb	0.519	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Se	0.514	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Sn	2.038	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Sr	0.567	1	101.5	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Ti	2.530	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Tl	0.498	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	V	1.013	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002SD	Y	Zn	0.994	1	95.95	3/22/2014	00:38	MSD	6010 D	
J1402025-002L	Y	Ag	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Al	0.027	5	98.86	3/22/2014	00:42	SD	6010 D	
J1402025-002L	Y	As	-0.001	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	B	0.017	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Ba	0.002	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Be	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Ca	6.320	5	98.86	3/22/2014	00:41	SD	6010 D	
J1402025-002L	Y	Cd	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Co	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Cr	0.001	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Cu	0.001	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Fe	0.165	5	98.86	3/22/2014	00:42	SD	6010 D	
J1402025-002L	Y	K	0.280	5	98.86	3/22/2014	00:41	SD	6010 D	
J1402025-002L	Y	Li	-0.004	5	99.05	3/22/2014	00:41	SD	6010 D	
J1402025-002L	Y	Mg	3.067	5	98.86	3/22/2014	00:42	SD	6010 D	
J1402025-002L	Y	Mn	0.005	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Mo	0.001	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Na	1.385	5	98.86	3/22/2014	00:41	SD	6010 D	
J1402025-002L	Y	Ni	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	P	0.012	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Pb	-0.002	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Sb	0.001	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Se	0.003	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Sn	0.002	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Sr	0.011	5	98.86	3/22/2014	00:41	SD	6010 D	
J1402025-002L	Y	Ti	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Tl	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	V	0.001	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002L	Y	Zn	0.000	5	99.05	3/22/2014	00:43	SD	6010 D	
J1402025-002A	Y	Ag	0.510	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Al	5.267	1	101.8	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	As	0.510	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	B	2.576	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Ba	0.513	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Be	0.205	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Ca	35.020	1	101.8	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Cd	0.258	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Co	0.500	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Cr	0.506	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Cu	0.511	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Fe	5.800	1	101.8	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	K	104.400	1	101.8	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Li	5.195	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Mg	19.520	1	101.8	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Mn	0.530	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Mo	0.516	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Na	32.390	1	101.8	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Ni	0.511	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	P	5.225	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Pb	0.504	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Sb	0.520	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Se	0.512	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Sn	2.031	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Sr	0.570	1	101.8	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Ti	2.541	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Tl	0.507	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	V	1.017	1	96.73	3/22/2014	00:46	PS	6010 D	
J1402025-002A	Y	Zn	1.008	1	96.73	3/22/2014	00:46	PS	6010 D	
CCV	Y	Ag	0.494	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Al	4.961	1	98.53	3/22/2014	00:49	CCV		
CCV	Y	As	0.500	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	B	2.440	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Ba	0.495	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Be	0.198	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Ca	4.968	1	98.53	3/22/2014	00:49	CCV		
CCV	Y	Cd	0.249	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Co	0.494	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Cr	0.497	1	95.26	3/22/2014	00:49	CCV		

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SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
CCV	Y	Cu	0.494	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Fe	4.989	1	98.53	3/22/2014	00:49	CCV		
CCV	Y	K	100.800	1	98.53	3/22/2014	00:49	CCV		
CCV	Y	Li	5.079	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Mg	4.943	1	98.53	3/22/2014	00:49	CCV		
CCV	Y	Mn	0.495	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Mo	0.504	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Na	25.380	1	98.53	3/22/2014	00:49	CCV		
CCV	Y	Ni	0.504	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	P	4.965	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Pb	0.495	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Sb	0.502	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Se	0.494	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Sn	2.014	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Sr	0.510	1	98.53	3/22/2014	00:49	CCV		
CCV	Y	Ti	2.481	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Tl	0.496	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	V	0.993	1	95.26	3/22/2014	00:49	CCV		
CCV	Y	Zn	0.988	1	95.26	3/22/2014	00:49	CCV		
CCB	Y	Ag	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Al	0.004	1	97.99	3/22/2014	00:53	CCB		
CCB	Y	As	-0.001	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	B	0.014	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Ba	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Be	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Ca	-0.004	1	97.99	3/22/2014	00:53	CCB		
CCB	Y	Cd	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Co	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Cr	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Cu	0.001	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Fe	0.001	1	97.99	3/22/2014	00:53	CCB		
CCB	Y	K	0.080	1	97.99	3/22/2014	00:53	CCB		
CCB	Y	Li	-0.005	1	97.94	3/22/2014	00:53	CCB		
CCB	Y	Mg	-0.008	1	97.99	3/22/2014	00:53	CCB		
CCB	Y	Mn	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Mo	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Na	0.023	1	97.99	3/22/2014	00:53	CCB		
CCB	Y	Ni	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	P	0.003	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Pb	-0.001	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Sb	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Se	0.002	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Sn	-0.001	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Sr	0.000	1	97.99	3/22/2014	00:53	CCB		
CCB	Y	Ti	0.000	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Tl	-0.001	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	V	0.001	1	97.94	3/22/2014	00:54	CCB		
CCB	Y	Zn	-0.003	1	97.94	3/22/2014	00:54	CCB		
J1402025-003	Y	Ag	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Al	0.096	1	101	3/22/2014	00:58	SAMP	6010 D	
J1402025-003	Y	As	0.004	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	B	0.028	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Ba	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Be	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Ca	23.240	1	101	3/22/2014	00:57	SAMP	6010 D	
J1402025-003	Y	Cd	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Co	0.001	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Cr	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Cu	0.001	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Fe	0.745	1	101	3/22/2014	00:58	SAMP	6010 D	
J1402025-003	Y	K	1.020	1	101	3/22/2014	00:57	SAMP	6010 D	
J1402025-003	Y	Li	-0.004	1	100	3/22/2014	00:57	SAMP	6010 D	
J1402025-003	Y	Mg	9.959	1	101	3/22/2014	00:58	SAMP	6010 D	
J1402025-003	Y	Mn	0.026	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Mo	0.006	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Na	5.487	1	101	3/22/2014	00:57	SAMP	6010 D	
J1402025-003	Y	Ni	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	P	0.195	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Pb	-0.004	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Sb	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Se	0.001	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Sn	0.007	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Sr	0.034	1	101	3/22/2014	00:57	SAMP	6010 D	
J1402025-003	Y	Ti	0.000	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Tl	0.001	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	V	0.003	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-003	Y	Zn	0.002	1	100	3/22/2014	00:59	SAMP	6010 D	
J1402025-004	Y	Ag	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Al	0.095	1	100.4	3/22/2014	01:03	SAMP	6010 D	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-004	Y	As	0.005	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	B	0.141	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Ba	0.009	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Be	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Ca	23.740	1	100.4	3/22/2014	01:02	SAMP	6010 D	
J1402025-004	Y	Cd	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Co	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Cr	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Cu	0.001	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Fe	0.245	1	100.4	3/22/2014	01:03	SAMP	6010 D	
J1402025-004	Y	K	25.610	1	100.4	3/22/2014	01:02	SAMP	6010 D	
J1402025-004	Y	Li	-0.004	1	99.07	3/22/2014	01:02	SAMP	6010 D	
J1402025-004	Y	Mg	7.860	1	100.4	3/22/2014	01:03	SAMP	6010 D	
J1402025-004	Y	Mn	0.060	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Mo	0.001	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Na	17.460	1	100.4	3/22/2014	01:02	SAMP	6010 D	
J1402025-004	Y	Ni	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	P	0.016	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Pb	-0.004	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Sb	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Se	0.003	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Sn	0.008	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Sr	0.199	1	100.4	3/22/2014	01:02	SAMP	6010 D	
J1402025-004	Y	Ti	0.000	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Tl	0.001	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	V	0.003	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-004	Y	Zn	0.002	1	99.07	3/22/2014	01:04	SAMP	6010 D	
J1402025-005	Y	Ag	0.000	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Al	0.099	1	100.6	3/22/2014	01:08	SAMP	6010 D	
J1402025-005	Y	As	0.003	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	B	0.031	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Ba	0.009	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Be	0.000	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Ca	30.740	1	100.6	3/22/2014	01:07	SAMP	6010 D	
J1402025-005	Y	Cd	0.000	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Co	0.000	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Cr	0.005	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Cu	0.001	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Fe	0.887	1	100.6	3/22/2014	01:08	SAMP	6010 D	
J1402025-005	Y	K	0.980	1	100.6	3/22/2014	01:07	SAMP	6010 D	
J1402025-005	Y	Li	-0.004	1	100.1	3/22/2014	01:07	SAMP	6010 D	
J1402025-005	Y	Mg	14.790	1	100.6	3/22/2014	01:08	SAMP	6010 D	
J1402025-005	Y	Mn	0.026	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Mo	0.003	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Na	6.717	1	100.6	3/22/2014	01:07	SAMP	6010 D	
J1402025-005	Y	Ni	0.000	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	P	0.050	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Pb	-0.003	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Sb	0.000	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Se	0.001	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Sn	0.008	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Sr	0.051	1	100.6	3/22/2014	01:07	SAMP	6010 D	
J1402025-005	Y	Ti	0.000	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Tl	0.002	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	V	0.003	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-005	Y	Zn	0.002	1	100.1	3/22/2014	01:09	SAMP	6010 D	
J1402025-006	Y	Ag	0.000	1	99.97	3/22/2014	01:13	SAMP	6010 D	
J1402025-006	Y	Al	0.471	1	100.6	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	As	0.002	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	B	0.020	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Ba	0.051	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Be	0.000	1	99.97	3/22/2014	01:13	SAMP	6010 D	
J1402025-006	Y	Ca	14.370	1	100.6	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	Cd	0.000	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Co	0.000	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Cr	0.000	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Cu	0.001	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Fe	0.005	1	100.6	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	K	3.925	1	100.6	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	Li	0.002	1	99.97	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	Mg	2.699	1	100.6	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	Mn	0.000	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Mo	0.008	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Na	11.050	1	100.6	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	Ni	0.000	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	P	0.013	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Pb	-0.003	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Sb	0.000	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Se	0.004	1	99.97	3/22/2014	01:14	SAMP	6010 D	

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
J1402025-006	Y	Sn	0.005	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Sr	0.317	1	100.6	3/22/2014	01:12	SAMP	6010 D	
J1402025-006	Y	Ti	0.000	1	99.97	3/22/2014	01:13	SAMP	6010 D	
J1402025-006	Y	Tl	0.001	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	V	0.002	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-006	Y	Zn	0.002	1	99.97	3/22/2014	01:14	SAMP	6010 D	
J1402025-007	Y	Ag	0.000	1	99.97	3/22/2014	01:18	SAMP	6010 D	
J1402025-007	Y	Al	0.121	1	100.8	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	As	0.002	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	B	0.024	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Ba	0.024	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Be	0.000	1	99.97	3/22/2014	01:18	SAMP	6010 D	
J1402025-007	Y	Ca	43.060	1	100.8	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	Cd	0.001	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Co	0.000	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Cr	0.002	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Cu	0.001	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Fe	0.341	1	100.8	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	K	5.289	1	100.8	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	Li	0.005	1	99.97	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	Mg	1.973	1	100.8	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	Mn	0.011	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Mo	0.003	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Na	2.742	1	100.8	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	Ni	0.032	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	P	0.156	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Pb	-0.005	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Sb	0.001	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Se	0.002	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Sn	0.012	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Sr	0.265	1	100.8	3/22/2014	01:17	SAMP	6010 D	
J1402025-007	Y	Ti	0.000	1	99.97	3/22/2014	01:18	SAMP	6010 D	
J1402025-007	Y	Tl	0.000	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	V	0.002	1	99.97	3/22/2014	01:19	SAMP	6010 D	
J1402025-007	Y	Zn	0.002	1	99.97	3/22/2014	01:19	SAMP	6010 D	
ICSA	Y	Ag	-0.006	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Al	756.800	1	91.61	3/22/2014	01:21	ICS-A		
ICSA	Y	As	0.011	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	B	0.048	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Ba	-0.001	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Be	0.002	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Ca	699.600	1	91.61	3/22/2014	01:21	ICS-A		
ICSA	Y	Cd	0.008	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Co	0.016	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Cr	-0.003	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Cu	0.002	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Fe	667.400	1	91.61	3/22/2014	01:21	ICS-A		
ICSA	Y	K	0.182	1	91.61	3/22/2014	01:21	ICS-A		
ICSA	Y	Li	-0.005	1	85.27	3/22/2014	01:21	ICS-A		
ICSA	Y	Mg	693.800	1	91.61	3/22/2014	01:21	ICS-A		
ICSA	Y	Mn	-0.012	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Mo	0.013	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Na	0.028	1	91.61	3/22/2014	01:21	ICS-A		
ICSA	Y	Ni	0.015	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	P	-0.002	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Pb	-0.013	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Sb	-0.010	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Se	0.004	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Sn	0.036	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Sr	-0.002	1	91.61	3/22/2014	01:21	ICS-A		
ICSA	Y	Ti	0.003	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Tl	0.005	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	V	-0.008	1	85.27	3/22/2014	01:22	ICS-A		
ICSA	Y	Zn	0.026	1	85.27	3/22/2014	01:22	ICS-A		
ICSAB	Y	Ag	0.207	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Al	769.900	1	92.53	3/22/2014	01:29	ICS-AB		
ICSAB	Y	As	0.210	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	B	1.006	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Ba	0.187	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Be	0.082	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Ca	692.800	1	92.53	3/22/2014	01:29	ICS-AB		
ICSAB	Y	Cd	0.112	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Co	0.199	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Cr	0.189	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Cu	0.211	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Fe	677.800	1	92.53	3/22/2014	01:29	ICS-AB		
ICSAB	Y	K	46.480	1	92.53	3/22/2014	01:29	ICS-AB		
ICSAB	Y	Li	2.298	1	85.26	3/22/2014	01:29	ICS-AB		
ICSAB	Y	Mg	700.500	1	92.53	3/22/2014	01:29	ICS-AB		

SAMPLE ID	RPT	Anal	Conc (mg/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	Method	Comments
ICSAB	Y	Mn	0.185	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Mo	0.208	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Na	11.370	1	92.53	3/22/2014	01:29	ICS-AB		
ICSAB	Y	Ni	0.199	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	P	2.024	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Pb	0.162	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Sb	0.200	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Se	0.202	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Sn	0.785	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Sr	0.209	1	92.53	3/22/2014	01:29	ICS-AB		
ICSAB	Y	Ti	1.027	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Tl	0.187	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	V	0.395	1	85.26	3/22/2014	01:30	ICS-AB		
ICSAB	Y	Zn	0.379	1	85.26	3/22/2014	01:30	ICS-AB		
CCV	Y	Ag	0.500	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Al	4.984	1	97.93	3/22/2014	01:37	CCV		
CCV	Y	As	0.501	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	B	2.452	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Ba	0.500	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Be	0.200	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Ca	4.952	1	97.93	3/22/2014	01:37	CCV		
CCV	Y	Cd	0.251	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Co	0.498	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Cr	0.501	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Cu	0.499	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Fe	4.990	1	97.93	3/22/2014	01:37	CCV		
CCV	Y	K	101.000	1	97.93	3/22/2014	01:37	CCV		
CCV	Y	Li	5.107	1	94.76	3/22/2014	01:37	CCV		
CCV	Y	Mg	4.969	1	97.93	3/22/2014	01:37	CCV		
CCV	Y	Mn	0.501	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Mo	0.508	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Na	25.590	1	97.93	3/22/2014	01:37	CCV		
CCV	Y	Ni	0.508	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	P	5.022	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Pb	0.503	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Sb	0.505	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Se	0.500	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Sn	2.037	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Sr	0.512	1	97.93	3/22/2014	01:37	CCV		
CCV	Y	Ti	2.507	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Tl	0.502	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	V	1.004	1	94.76	3/22/2014	01:38	CCV		
CCV	Y	Zn	1.002	1	94.76	3/22/2014	01:38	CCV		
CCB	Y	Ag	0.000	1	98.32	3/22/2014	01:42	CCB		
CCB	Y	Al	-0.018	1	97.16	3/22/2014	01:41	CCB		
CCB	Y	As	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	B	0.005	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Ba	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Be	0.000	1	98.32	3/22/2014	01:42	CCB		
CCB	Y	Ca	-0.005	1	97.16	3/22/2014	01:41	CCB		
CCB	Y	Cd	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Co	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Cr	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Cu	0.001	1	98.32	3/22/2014	01:42	CCB		
CCB	Y	Fe	0.001	1	97.16	3/22/2014	01:41	CCB		
CCB	Y	K	0.038	1	97.16	3/22/2014	01:41	CCB		
CCB	Y	Li	-0.005	1	98.32	3/22/2014	01:41	CCB		
CCB	Y	Mg	-0.001	1	97.16	3/22/2014	01:41	CCB		
CCB	Y	Mn	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Mo	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Na	0.020	1	97.16	3/22/2014	01:41	CCB		
CCB	Y	Ni	0.000	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	P	0.001	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Pb	-0.002	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Sb	0.001	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Se	0.003	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Sn	-0.001	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Sr	0.000	1	97.16	3/22/2014	01:41	CCB		
CCB	Y	Ti	0.000	1	98.32	3/22/2014	01:42	CCB		
CCB	Y	Tl	-0.001	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	V	0.001	1	98.32	3/22/2014	01:43	CCB		
CCB	Y	Zn	-0.003	1	98.32	3/22/2014	01:43	CCB		

Columbia Analytical Services

Analytical Run Coversheet

Analyst: SRO Data File ID: 032614B LIMS Run #: 385006

Analysis: ICP-MS Method References: 200.8 / 6020 Inst ID: J-ICP-MS-01

Standard's Trace Numbers

STD ID	Trace #	Exp Date	STD ID	Trace #	Exp Date
ICAL-1	MET-17-81C	4-1-14	INT STD	MET-17-83F	4-26-14
ICAL-2	81D		ICSA	84A	4-2-14
ICAL-3	81E		ICSAB	84B ~~84B~~	4-1-14
ICAL-4	81F		Blank / Diluent	83E	3-26-15
ICV	81G				

Standard Concentrations and Ranges

Element	MRL	Linear Range	ICV	CCV	LCS	ICSA	ICSAB	Units	ICV RSD	
9Be	0.5	3000	20	25	25	0	10	ug/L	1.265	Stability Report < 5%
27Al	50	50000	500	2500	2500	50000	51000	ug/L	1.032	
47Ti	5	5000	250	250	250	1000	1100	ug/L	0.865	
48Ti	5	5000	250	250	250	1000	1100	ug/L	0.893	
51V	2	10000	100	100	100	0	40	ug/L	0.037	
52Cr	1	5000	50	50	50	0	20	ug/L	0.26	
55Mn	2	5000	50	100	100	0	40	ug/L	0.729	
59Co	1	5000	50	50	50	0	20	ug/L	1.182	Cal Curves > 0.995
60Ni	2	5000	50	100	100	0	40	ug/L	1.168	
62Ni	2	5000	50	100	100	0	40	ug/L	4.264	
63Cu	1	5000	50	50	50	0	20	ug/L	0.479	
65Cu	1	5000	50	50	50	0	20	ug/L	0.123	
66Zn	5	10000	100	250	250	0	100	ug/L	0.596	
68Zn	5	10000	100	250	250	0	100	ug/L	1.576	
75As	1	5000	50	50	50	0	20	ug/L	0.696	
78Se	2	5000	50	100	100	0	40	ug/L	0.652	Mass Call Rpt Incl.
82Se	2	5000	50	100	100	0	40	ug/L	1.835	
86Sr	2	5000	50	100	100	0	40	ug/L	1.517	
88Sr	2	5000	50	100	100	0	40	ug/L	0.777	
97Mo	2	5000	50	100	100	1000	1040	ug/L	2.108	
98Mo	2	5000	50	100	100	1000	1040	ug/L	0.623	
107Ag	0.5	100	50	25	25	0	10	ug/L	1.305	
109Ag	0.5	100	50	25	25	0	10	ug/L	1.56	
111Cd	0.4	2500	25	20	20	0	8	ug/L	1.148	
114Cd	0.4	2500	25	20	20	0	8	ug/L	1.819	
118Sn	5	20000	200	250	250	0	100	ug/L	1.285	
120Sn	5	20000	200	250	250	0	100	ug/L	1.194	
121Sb	1	5000	50	50	50	0	20	ug/L	3.228	
123Sb	1	5000	50	50	50	0	20	ug/L	1.425	
135Ba	2	5000	50	100	100	0	40	ug/L	1.416	
137Ba	2	5000	50	100	100	0	40	ug/L	2.834	
203Tl	0.2	5000	50	10	10	0	4	ug/L	1.651	
205Tl	0.2	5000	50	10	10	0	4	ug/L	2.316	
208Pb	0.5	5000	50	25	25	0	10	ug/L	1.077	

Comments

2025 Samples and T4.

Isotopes in **BOLD** are the default isotopes used for reporting.

Reviewed By / Date: VP 3/31/14

ICP-MS Run Sequence **Date File ID: 032614B**

#	Samp / Std ID	Date	Time	#	Samp / Std ID	Date	Time	#	Samp / Std ID	Date	Time
1	Cal Blank	3/26/14	22:43								
2	Cal 1	3/26/14	22:48								
3	Cal 2	3/26/14	22:53								
4	Cal 3	3/26/14	22:58								
5	Cal 4	3/26/14	23:03								
6	ICV	3/26/14	23:08								
7	ICB	3/26/14	23:13								
8	MRL	3/26/14	23:18								
9	ICSA	3/26/14	23:23								
10	ICSAB	3/26/14	23:28								
11	CCV-1	3/26/14	23:33								
12	CCB-1	3/26/14	23:38								
13	MB-02133-04	3/26/14	23:43								
14	LCS-02133-03	3/26/14	23:48								
15	J1402003-001	3/26/14	23:53								
16	J1402003-002	3/26/14	23:58								
17	J1402003-003	3/27/14	0:03								
18	J1402003-004	3/27/14	0:08								
19	J1402025-001	3/27/14	0:13								
20	J1402025-002	3/27/14	0:18								
21	J1402025-003	3/27/14	0:23								
22	J1402025-004	3/27/14	0:28								
23	CCV-2	3/27/14	0:33								
24	CCB-2	3/27/14	0:38								
25	J1402025-005	3/27/14	0:43								
26	J1402025-006	3/27/14	0:49								
27	J1402026-001	3/27/14	0:54								
28	J1402026-001S	3/27/14	0:59								
29	J1402026-001SD	3/27/14	1:04								
30	J1402026-001L	3/27/14	1:09								
31	J1402026-001A	3/27/14	1:14								
32	J1402026-002	3/27/14	1:19								
33	J1402026-003	3/27/14	1:24								
34	J1402026-004	3/27/14	1:29								
35	CCV-3	3/27/14	1:34								
36	CCB-3	3/27/14	1:39								
37	J1402026-005	3/27/14	1:44								
38	J1402026-006	3/27/14	1:49								
39	CCV-4	3/27/14	1:54								
40	CCB-4	3/27/14	1:59								

ICP-MS DATA REPORTED WITH FAILING CRITERIA

Data File ID: 032614B

Sample ID	Analyte	Failure(s)	Analyst's Comments

ICP-MS Isotope Discrepancy Summary Sheet

Sample ID	Isotope-1	Isotope-1 Conc (ug/L)	Isotope-2	Isotope-2 Conc (ug/L)	RPD	ANAL DATE / TIME
J1402025-001	**47Ti**	0.154	48Ti	35.91	198.3	3/27/2014 0:13
J1402025-002	**47Ti**	0.592	48Ti	22.81	189.9	3/27/2014 0:18
J1402025-003	**47Ti**	0.946	48Ti	16.57	178.4	3/27/2014 0:23
J1402025-004	**47Ti**	0.154	48Ti	16.3	196.3	3/27/2014 0:28
J1402025-005	**47Ti**	0.541	48Ti	22.01	190.4	3/27/2014 0:43
J1402026-001	**47Ti**	0.486	48Ti	35.99	194.7	3/27/2014 0:54
J1402026-001	**66Zn**	3.695	68Zn	10.43	95.4	3/27/2014 0:54
J1402026-002	**47Ti**	1.215	48Ti	24.82	181.3	3/27/2014 1:19
J1402026-003	**47Ti**	0.922	48Ti	24.66	185.6	3/27/2014 1:24
J1402026-004	**47Ti**	0.952	48Ti	61.58	193.9	3/27/2014 1:29
J1402026-005	**47Ti**	2.366	48Ti	169	194.5	3/27/2014 1:44
J1402026-005	**66Zn**	9.553	68Zn	34.72	113.7	3/27/2014 1:44
J1402026-006	**47Ti**	1.719	48Ti	62.32	189.3	3/27/2014 1:49
J1402026-006	**66Zn**	7.737	68Zn	29.7	117.3	3/27/2014 1:49

Isotopes Reported Other Than Defaults When Defaults Pass QC Checks

Data File ID: 032614B

Sample ID	Reported Isotope	Reported Conc	Default Isotope	Default Conc	Analyst's Comments

VB

Excluded In Calib	Excluded In Results	Peak Run Excluded	Multi Element	Semi Quant	Internal Standard	Standard Addition

Uncorrected ICPS Per Mass

S-Calibration Has Edited Standard
F-Interference Correction Failed
E-Calibration Edited
T-Tripped
I-Invalid Calibration
P-Pulse Counting
V-Valley Integration Failed
M-Result Over Max

Run	Label	TimeStamp	5Bkg	7Li	9Be	24Mg	25Mg	26Mg
1	Stability_0326_5	3/26/2014 7:11:10 P	(P)0.000	(P)113540.740	(P)67684.481	(P)163250.590	(P)22990.719	(P)28175.548
2	Stability_0326_5	3/26/2014 7:11:38 P	(P)0.000	(P)117212.430	(P)66253.380	(P)164280.350	(P)23355.744	(P)28379.288
3	Stability_0326_5	3/26/2014 7:12:07 P	(P)0.000	(P)140941.020	(P)60092.842	(P)163083.300	(P)23455.932	(P)28102.080
4	Stability_0326_5	3/26/2014 7:12:35 P	(P)0.000	(P)129084.160	(P)65452.980	(P)164268.070	(P)23330.160	(P)28414.924
5	Stability_0326_5	3/26/2014 7:13:04 P	(P)0.000	(P)126361.290	(P)63756.424	(P)165336.700	(P)23449.246	(P)28316.936
	Mean of Stability_032	3/26/2014 7:11:10 P	(P)0.000	(P)125427.930	(P)64648.022	(P)164043.800	(P)23316.360	(P)28277.755
	SD of Stability_0326_5		(P)0.000	(P)10766.790	(P)2915.040	(P)912.355	(P)190.344	(P)134.134
	%RSD of Stability_		(P)0.000	(P)8.584	(P)4.509	(P)0.556	(P)0.816	(P)0.474

Run	Label	TimeStamp	59Co	138Ba++	113In	115In	138Ba	140Ce
1	Stability_0326_5	3/26/2014 7:11:10 P	(P)378640.690	(P)22664.635	(P)16869.956	(P)390876.370	(P)268214.720	(P)332305.520
2	Stability_0326_5	3/26/2014 7:11:38 P	(P)380181.600	(P)22730.296	(P)16912.227	(P)390038.640	(P)273327.860	(P)336524.260
3	Stability_0326_5	3/26/2014 7:12:07 P	(P)378997.120	(P)23078.630	(P)16865.507	(P)385813.010	(P)263182.250	(P)341083.450
4	Stability_0326_5	3/26/2014 7:12:35 P	(P)376565.750	(P)22852.716	(P)16946.713	(P)387641.510	(P)266506.260	(P)344206.330
5	Stability_0326_5	3/26/2014 7:13:04 P	(P)378257.170	(P)22819.323	(P)16935.589	(P)386499.780	(P)265286.520	(P)337754.030
	Mean of Stability_032	3/26/2014 7:11:10 P	(P)378528.470	(P)22829.120	(P)16905.998	(P)388173.860	(P)267303.520	(P)338374.720
	SD of Stability_0326_5		(P)1312.531	(P)157.900	(P)37.117	(P)2204.570	(P)3834.442	(P)4527.404
	%RSD of Stability_		(P)0.347	(P)0.692	(P)0.220	(P)0.568	(P)1.434	(P)1.338

Run	Label	TimeStamp	154Ba O	156Ce O	175	206Pb	207Pb	208Pb
1	Stability_0326_5	3/26/2014 7:11:10 P	(P)574.456	(P)52822.026	(P)38.889	(P)98121.412	(P)82232.716	(P)204320.810
2	Stability_0326_5	3/26/2014 7:11:38 P	(P)538.899	(P)55845.658	(P)31.111	(P)97451.272	(P)83197.138	(P)206172.730
3	Stability_0326_5	3/26/2014 7:12:07 P	(P)535.566	(P)54675.565	(P)38.889	(P)97367.354	(P)82617.103	(P)205269.960
4	Stability_0326_5	3/26/2014 7:12:35 P	(P)498.898	(P)51193.840	(P)34.444	(P)96469.084	(P)81220.245	(P)205181.890
5	Stability_0326_5	3/26/2014 7:13:04 P	(P)486.675	(P)52722.824	(P)43.333	(P)96140.198	(P)81882.907	(P)204262.220
	Mean of Stability_032	3/26/2014 7:11:10 P	(P)526.899	(P)53451.982	(P)37.333	(P)97109.864	(P)82230.022	(P)205041.520
	SD of Stability_0326_5		(P)34.939	(P)1820.341	(P)4.688	(P)799.522	(P)745.871	(P)787.123
	%RSD of Stability_		(P)6.631	(P)3.406	(P)12.557	(P)0.823	(P)0.907	(P)0.384

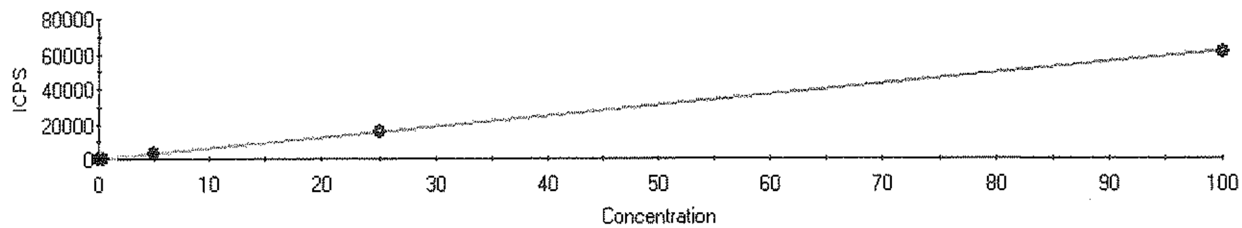
Run	Label	TimeStamp	209Bi	220Bkg	238U
1	Stability_0326_5	3/26/2014 7:11:10 P	(P)324100.290	(P)0.000	(P)396815.810
2	Stability_0326_5	3/26/2014 7:11:38 P	(P)323779.310	(P)0.556	397706.880
3	Stability_0326_5	3/26/2014 7:12:07 P	(P)320345.300	(P)0.000	392780.060
4	Stability_0326_5	3/26/2014 7:12:35 P	(P)322800.760	(P)0.000	387488.270
5	Stability_0326_5	3/26/2014 7:13:04 P	(P)325225.390	(P)0.000	395288.200
	Mean of Stability_032	3/26/2014 7:11:10 P	(P)323250.210	(P)0.111	394015.840
	SD of Stability_0326_5		(P)1840.138	(P)0.248	4099.352
	%RSD of Stability_		(P)0.569	(P)223.607	1.040

ICP-MS MASS CALIBRATION SUMMARY SHEET

Data File ID: 032614B

Element	Mass	Mass DAC	Peak Width (AMU)	Error (AMU)	Include	Resolution PASS / FAIL (< 0.9 AMU)	Accuracy PASS / FAIL (+/- 0.1 AMU)
Be	9.012	2006	0.715	0.028	TRUE	PASS	PASS
Mg	23.985	5820	0.664	0.044	TRUE	PASS	PASS
Mg	24.986	6074	0.715	0.042	TRUE	PASS	PASS
Mg	25.983	6321	0.715	0.016	TRUE	PASS	PASS
Al	26.982	6581	0.715	0.038	TRUE	PASS	PASS
Ti	46.952	11651	0.766	-0.011	TRUE	PASS	PASS
V	50.944	12665	0.766	-0.02	TRUE	PASS	PASS
Cr	51.94	12925	0.766	0.005	TRUE	PASS	PASS
Mn	54.938	13679	0.766	-0.031	TRUE	PASS	PASS
Co	58.933	14700	0.817	-0.016	TRUE	PASS	PASS
Ni	59.931	14953	0.766	-0.02	TRUE	PASS	PASS
Cu	64.928	16221	0.817	-0.036	TRUE	PASS	PASS
Zn	65.926	16474	0.766	-0.041	TRUE	PASS	PASS
As	74.922	18769	0.817	-0.023	TRUE	PASS	PASS
Se	77.919	19529	0.766	-0.036	TRUE	PASS	PASS
Sr	85.91	21568	0.817	-0.02	TRUE	PASS	PASS
Mo	97.905	24629	0.766	0.002	TRUE	PASS	PASS
Ag	108.905	27431	0.714	0.002	TRUE	PASS	PASS
Cd	113.903	28711	0.765	0.028	TRUE	PASS	PASS
Sn	117.902	29732	0.714	0.037	TRUE	PASS	PASS
Sb	122.904	31006	0.714	0.035	TRUE	PASS	PASS
Ba	136.906	34574	0.663	0.035	TRUE	PASS	PASS
Tl	204.972	51923	0.713	0.012	TRUE	PASS	PASS
Pb	205.974	52170	0.713	-0.022	TRUE	PASS	PASS
Pb	206.976	52430	0.713	-0.005	TRUE	PASS	PASS
Pb	207.977	52690	0.713	0.014	TRUE	PASS	PASS

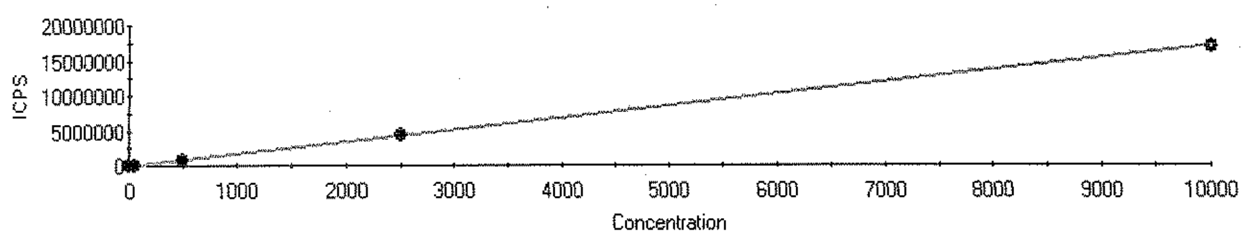
Fully Quant Calibration 9Be FQ Block 1



Intercept CPS=9.190506 Intercept Conc=0.014924
Sensitivity=615.820828 Correlation Coeff=0.998898

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	9.41	
Cal 1	0.50	0.48	-0.02	306.65	-0.02
Cal 2	5.00	5.16	0.16	3,187.58	0.16
Cal 3	25.00	25.48	0.48	15,699.81	0.48
Cal 4	100.00	98.91	-1.09	60,920.91	-1.09

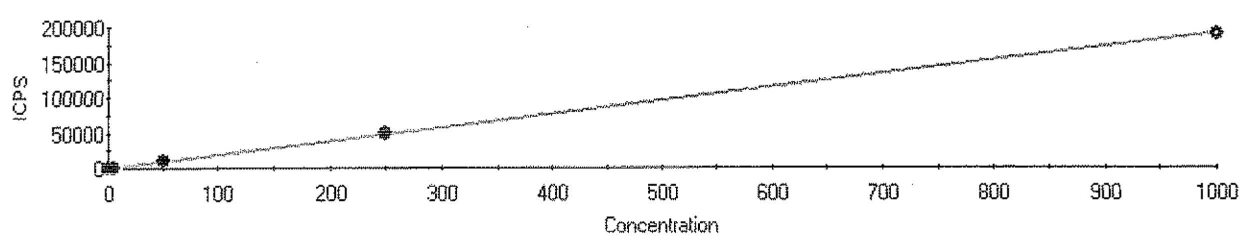
Fully Quant Calibration 27Al FQ Block 1



Intercept CPS=1187.511069 Intercept Conc=0.689636
Sensitivity=1721.939215 Correlation Coeff=0.997249

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	1,191.30	
Cal 1	50.00	47.62	-2.38	83,191.26	-2.38
Cal 2	500.00	510.67	10.67	880,537.63	10.67
Cal 3	2,500.00	2,507.19	7.19	4,318,424.43	7.19
Cal 4	10,000.00	9,819.52	-180.48	16,909,805.78	-180.48

Fully Quant Calibration 47Ti FQ Block 1

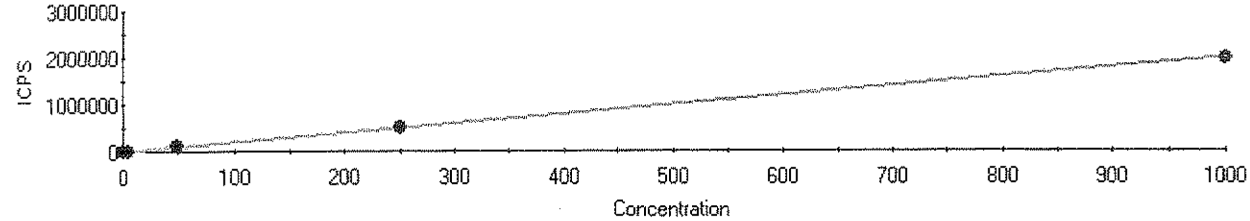


Intercept CPS=32.440386 Intercept Conc=0.169297
Sensitivity=191.617775 Correlation Coeff=0.999754

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	33.35	
Cal 1	5.00	4.70	-0.30	932.59	-0.30
Cal 2	50.00	50.26	0.26	9,662.62	0.26
Cal 3	250.00	251.32	1.32	48,189.76	1.32

Cal 4	1,000.00	988.76	-11.24	189,497.16	-11.24

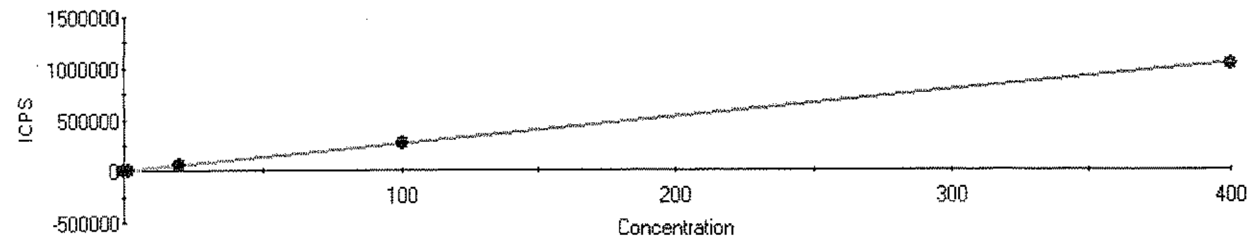
Fully Quant Calibration 48Ti FQ Block 1



Intercept CPS=206.085219 Intercept Conc=0.103331
Sensitivity=1934.416510 Correlation Coeff=0.998082

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.01	0.01	217.05	
Cal 1	5.00	4.90	-0.10	9,981.65	-0.10
Cal 2	50.00	50.22	0.22	100,358.11	0.22
Cal 3	250.00	256.85	6.85	512,478.53	6.85
Cal 4	1,000.00	992.01	-7.99	1,978,677.68	-7.99

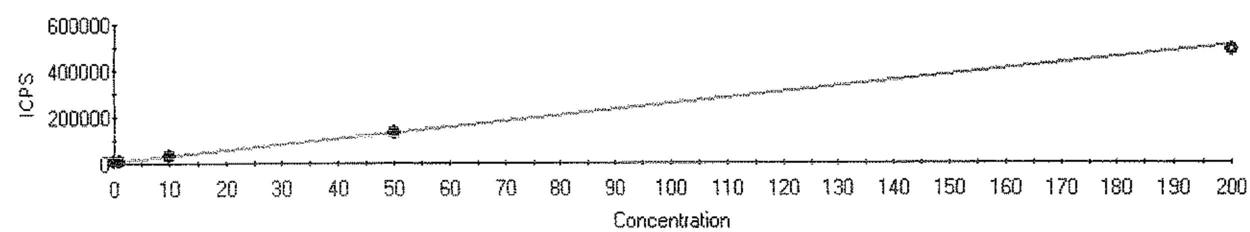
Fully Quant Calibration 51V FQ Block 1



Intercept CPS=-2187.479488 Intercept Conc=-0.829731
Sensitivity=2636.370603 Correlation Coeff=0.999495

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.34	-0.34	-3,080.93	
Cal 1	2.00	2.36	0.36	4,037.11	0.36
Cal 2	20.00	19.95	-0.05	50,403.04	-0.05
Cal 3	100.00	101.20	1.20	264,625.14	1.20
Cal 4	400.00	393.13	-6.87	1,034,260.15	-6.87

Fully Quant Calibration 52Cr FQ Block 1



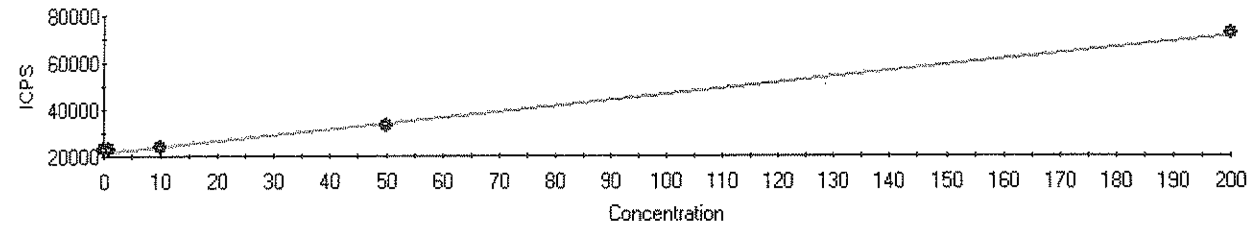
Intercept CPS=4106.535319 Intercept Conc=1.639750
Sensitivity=2504.366729 Correlation Coeff=0.999528

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.02	0.02	4,161.77	
Cal 1	1.00	0.99	-0.01	6,591.75	-0.01
Cal 2	10.00	9.77	-0.23	28,564.87	-0.23

372

Cal 3	50.00	50.31	0.31	130,100.71	0.31
Cal 4	200.00	192.56	-7.44	486,358.17	-7.44

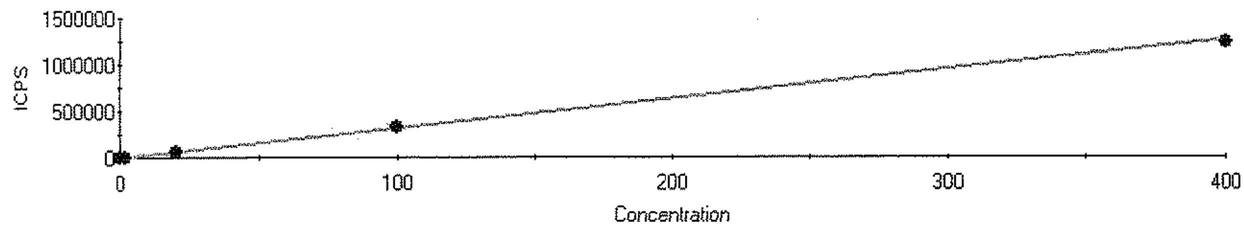
Fully Quant Calibration 53Cr FQ Block 1



Intercept CPS=21913.567349 Intercept Conc=88.157096
Sensitivity=248.574060 Correlation Coeff=0.998141

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	3.44	3.44	22,767.44	
Cal 1	1.00	4.08	3.08	22,928.24	3.08
Cal 2	10.00	6.70	-3.30	23,580.10	-3.30
Cal 3	50.00	45.51	-4.49	33,225.09	-4.49
Cal 4	200.00	201.27	1.27	71,944.80	1.27

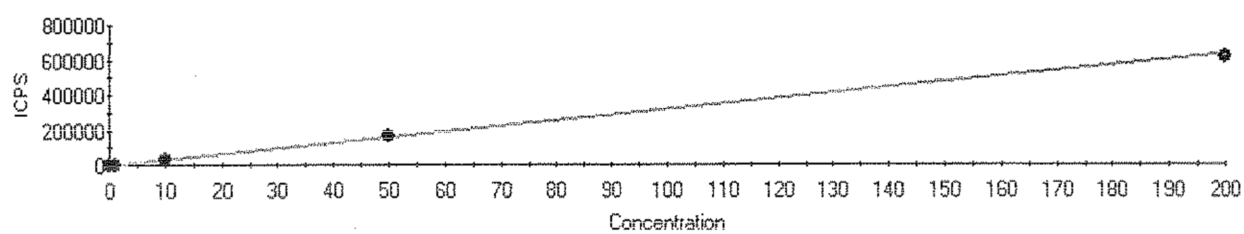
Fully Quant Calibration 55Mn FQ Block 1



Intercept CPS=167.404449 Intercept Conc=0.052883
Sensitivity=3165.542615 Correlation Coeff=0.997914

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	167.45	
Cal 1	2.00	1.97	-0.03	6,399.97	-0.03
Cal 2	20.00	20.12	0.12	63,863.23	0.12
Cal 3	100.00	102.99	2.99	326,182.19	2.99
Cal 4	400.00	389.90	-10.10	1,234,413.95	-10.10

Fully Quant Calibration 59Co FQ Block 1



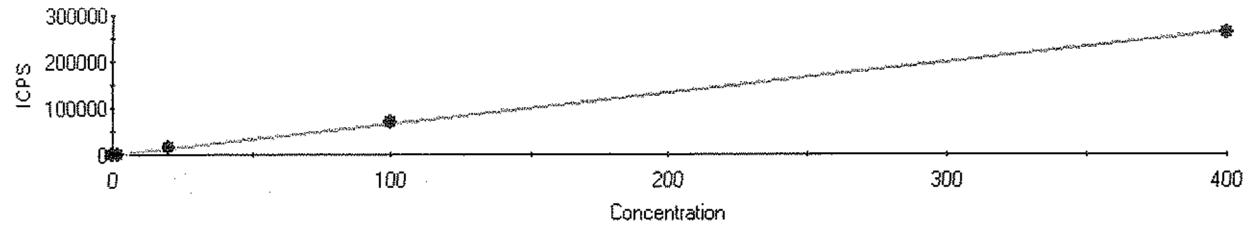
Intercept CPS=11.009602 Intercept Conc=0.003479
Sensitivity=3164.692466 Correlation Coeff=0.999345

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	11.11	
Cal 1	1.00	0.95	-0.05	3,011.73	-0.05

373

Cal 2	10.00	9.92	-0.08	31,416.10	-0.08
Cal 3	50.00	50.54	0.54	159,960.01	0.54
Cal 4	200.00	194.62	-5.38	615,932.77	-5.38

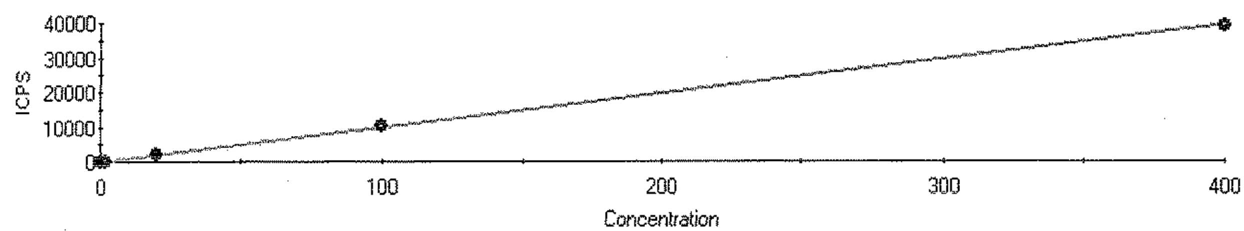
Fully Quant Calibration 60Ni FQ Block 1



Intercept CPS=21.564538 Intercept Conc=0.032302
Sensitivity=667.587251 Correlation Coeff=0.998259

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	24.86	
Cal 1	2.00	1.96	-0.04	1,327.84	-0.04
Cal 2	20.00	20.40	0.40	13,639.50	0.40
Cal 3	100.00	102.80	2.80	68,646.93	2.80
Cal 4	400.00	391.30	-8.70	261,249.31	-8.70

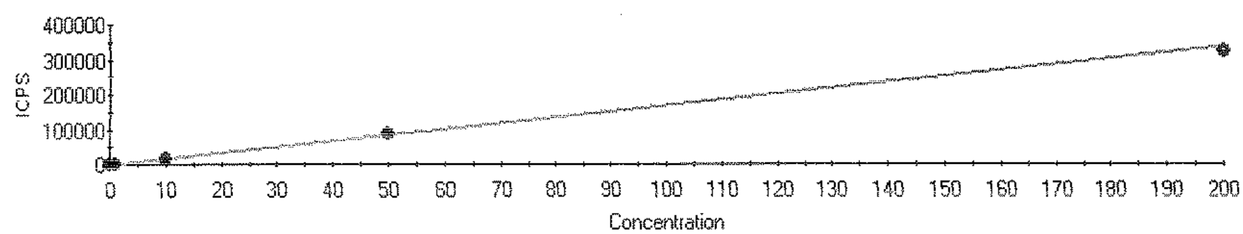
Fully Quant Calibration 62Ni FQ Block 1



Intercept CPS=43.238567 Intercept Conc=0.439835
Sensitivity=98.306417 Correlation Coeff=0.999698

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.02	-0.02	41.01	
Cal 1	2.00	2.08	0.08	248.04	0.08
Cal 2	20.00	20.44	0.44	2,052.78	0.44
Cal 3	100.00	102.10	2.10	10,080.47	2.10
Cal 4	400.00	397.59	-2.41	39,128.84	-2.41

Fully Quant Calibration 63Cu FQ Block 1



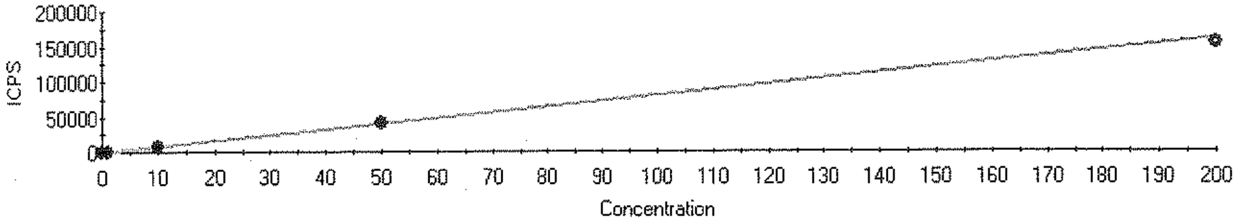
Intercept CPS=170.478112 Intercept Conc=0.101467
Sensitivity=1680.136507 Correlation Coeff=0.998471

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	162.44	

374

Cal 1	1.00	1.00	0.00	1,857.66	0.00
Cal 2	10.00	10.05	0.05	17,063.10	0.05
Cal 3	50.00	51.10	1.10	86,026.17	1.10
Cal 4	200.00	193.37	-6.63	325,063.45	-6.63

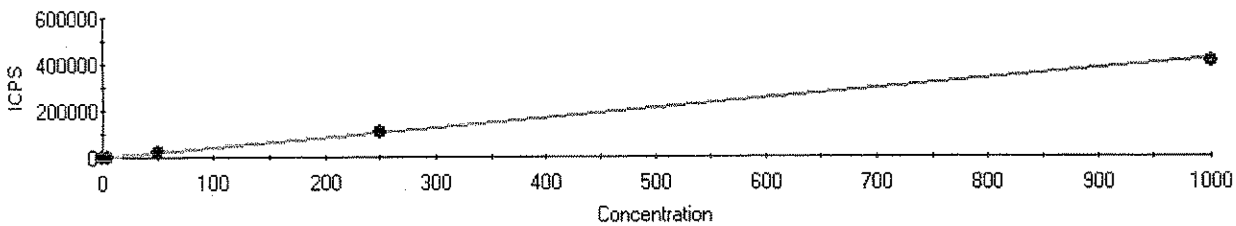
Fully Quant Calibration 65Cu FQ Block 1



Intercept CPS=76.416627 Intercept Conc=0.094035
Sensitivity=812.640954 Correlation Coeff=0.999295

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.01	-0.01	67.43	
Cal 1	1.00	1.04	0.04	919.49	0.04
Cal 2	10.00	9.84	-0.16	8,070.62	-0.16
Cal 3	50.00	50.30	0.30	40,952.28	0.30
Cal 4	200.00	189.88	-10.12	154,381.14	-10.12

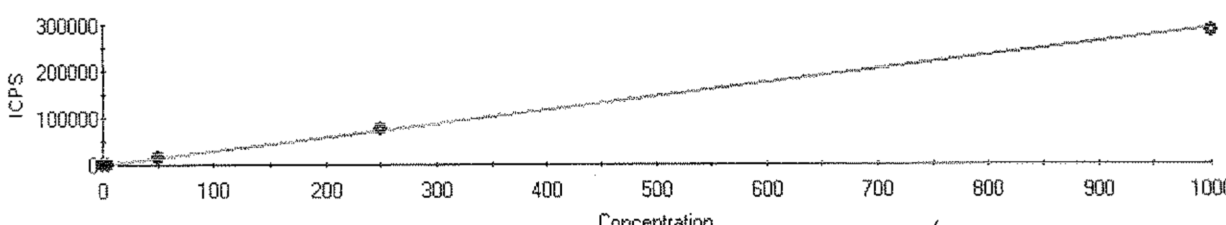
Fully Quant Calibration 66Zn FQ Block 1



Intercept CPS=129.286951 Intercept Conc=0.304845
Sensitivity=424.107732 Correlation Coeff=0.999602

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.03	0.03	141.78	
Cal 1	5.00	4.73	-0.27	2,136.20	-0.27
Cal 2	50.00	49.99	-0.01	21,329.73	-0.01
Cal 3	250.00	251.13	1.13	106,635.99	1.13
Cal 4	1,000.00	952.44	-47.56	404,067.40	-47.56

Fully Quant Calibration 68Zn FQ Block 1

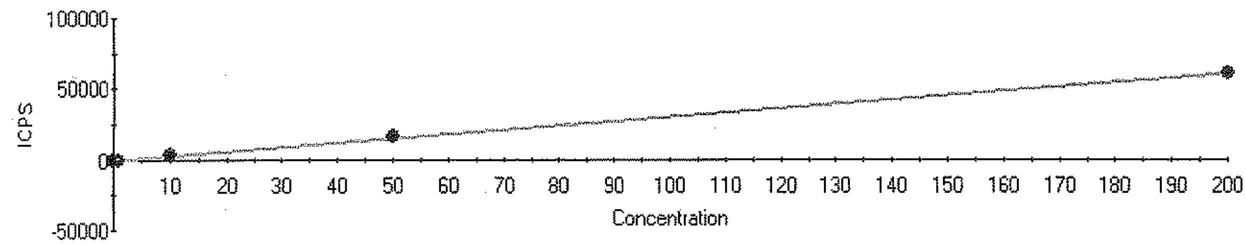


Intercept CPS=122.804323 Intercept Conc=0.419474
Sensitivity=292.757891 Correlation Coeff=0.997538

Label	Defined	Measured	Error	Mean CPS	%Error

Cal Blank	0.00	0.01	0.01	125.75	
Cal 1	5.00	4.99	-0.01	1,583.10	-0.01
Cal 2	50.00	51.03	1.03	15,061.08	1.03
Cal 3	250.00	257.52	7.52	75,513.65	7.52
Cal 4	1,000.00	971.55	-28.45	284,550.83	-28.45

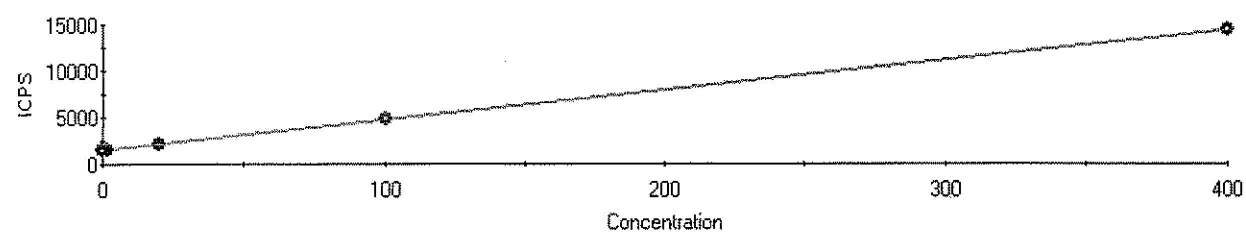
Fully Quant Calibration 75As FQ Block 1



Intercept CPS=19.666717 Intercept Conc=0.064495
Sensitivity=304.931719 Correlation Coeff=0.999818

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.35	-0.35	-85.73	
Cal 1	1.00	0.40	-0.60	141.03	-0.60
Cal 2	10.00	9.38	-0.62	2,880.36	-0.62
Cal 3	50.00	52.04	2.04	15,889.24	2.04
Cal 4	200.00	199.52	-0.48	60,860.61	-0.48

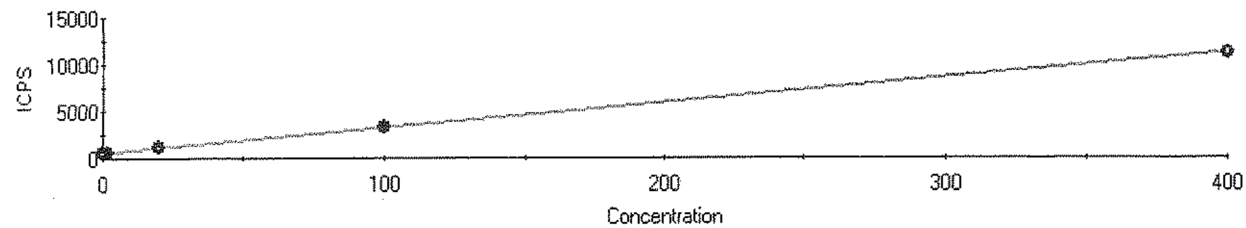
Fully Quant Calibration 76Se FQ Block 1



Intercept CPS=1455.615816 Intercept Conc=44.672260
Sensitivity=32.584333 Correlation Coeff=0.998874

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.14	0.14	1,460.27	
Cal 1	2.00	1.76	-0.24	1,512.94	-0.24
Cal 2	20.00	18.87	-1.13	2,070.33	-1.13
Cal 3	100.00	104.23	4.23	4,851.82	4.23
Cal 4	400.00	397.04	-2.96	14,392.75	-2.96

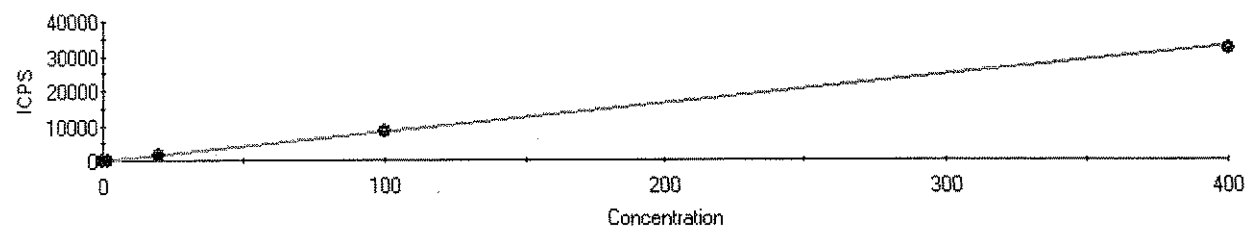
Fully Quant Calibration 77Se FQ Block 1



Intercept CPS=490.866100 Intercept Conc=17.979550
Sensitivity=27.301356 Correlation Coeff=0.997626

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.32	-0.32	482.13	
Cal 1	2.00	2.83	0.83	568.10	0.83
Cal 2	20.00	21.63	1.63	1,081.31	1.63
Cal 3	100.00	101.74	1.74	3,268.40	1.74
Cal 4	400.00	393.70	-6.30	11,239.46	-6.30

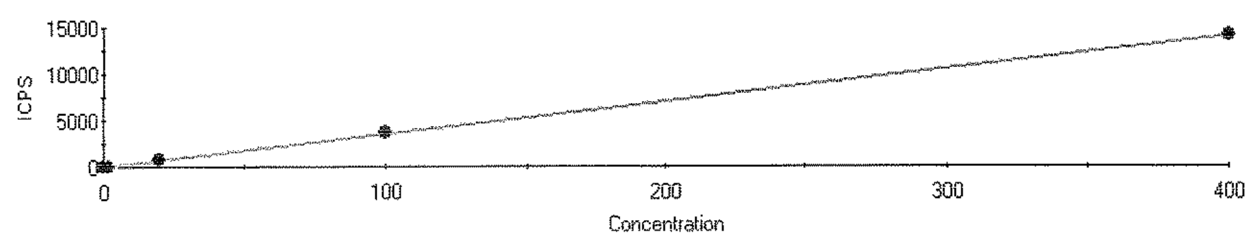
Fully Quant Calibration 78Se FQ Block 1



Intercept CPS=32.616163 Intercept Conc=0.396150
Sensitivity=82.332850 Correlation Coeff=0.998720

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.04	0.04	36.04	
Cal 1	2.00	1.87	-0.13	186.94	-0.13
Cal 2	20.00	19.82	-0.18	1,664.54	-0.18
Cal 3	100.00	102.25	2.25	8,451.16	2.25
Cal 4	400.00	388.83	-11.17	32,046.20	-11.17

Fully Quant Calibration 82Se FQ Block 1

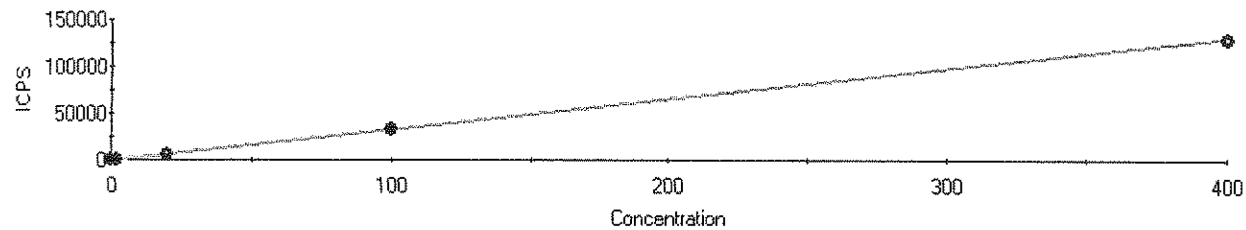


Intercept CPS=8.355028 Intercept Conc=0.238709
Sensitivity=35.000964 Correlation Coeff=0.999858

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.01	-0.01	7.90	
Cal 1	2.00	1.84	-0.16	72.69	-0.16
Cal 2	20.00	20.52	0.52	726.57	0.52
Cal 3	100.00	104.35	4.35	3,660.67	4.35

Cal 4	400.00	399.15	-0.85	13,978.85	-0.85

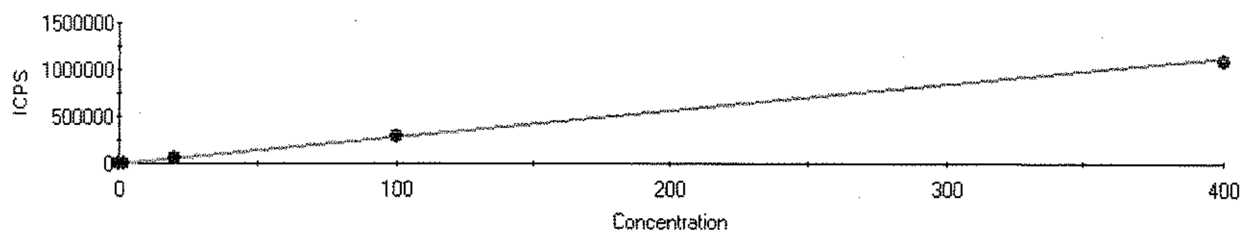
Fully Quant Calibration 86Sr FQ Block 1



Intercept CPS=24.603232 Intercept Conc=0.074967
Sensitivity=328.188641 Correlation Coeff=0.999621

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	24.64	
Cal 1	2.00	1.93	-0.07	659.54	-0.07
Cal 2	20.00	20.05	0.05	6,604.22	0.05
Cal 3	100.00	100.79	0.79	33,102.93	0.79
Cal 4	400.00	392.12	-7.88	128,713.40	-7.88

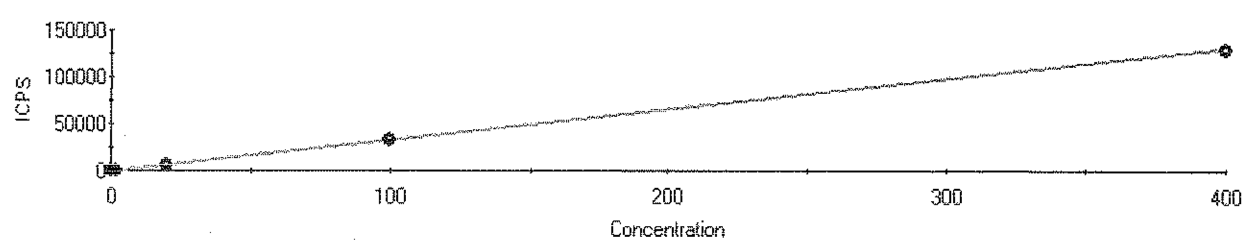
Fully Quant Calibration 88Sr FQ Block 1



Intercept CPS=76.290845 Intercept Conc=0.027012
Sensitivity=2824.332313 Correlation Coeff=0.998265

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	74.51	
Cal 1	2.00	2.01	0.01	5,764.88	0.01
Cal 2	20.00	19.83	-0.17	56,081.25	-0.17
Cal 3	100.00	102.04	2.04	288,257.46	2.04
Cal 4	400.00	389.02	-10.98	1,098,800.23	-10.98

Fully Quant Calibration 97Mo FQ Block 1



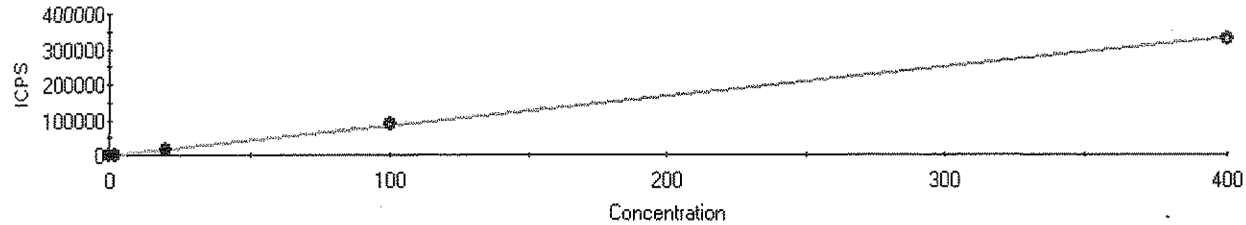
Intercept CPS=15.644144 Intercept Conc=0.048159
Sensitivity=324.846804 Correlation Coeff=0.997538

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	17.10	
Cal 1	2.00	1.89	-0.11	628.13	-0.11
Cal 2	20.00	20.40	0.40	6,642.81	0.40

378

Cal 3	100.00	101.54	1.54	33,000.20	1.54
Cal 4	400.00	395.20	-4.80	128,396.18	-4.80

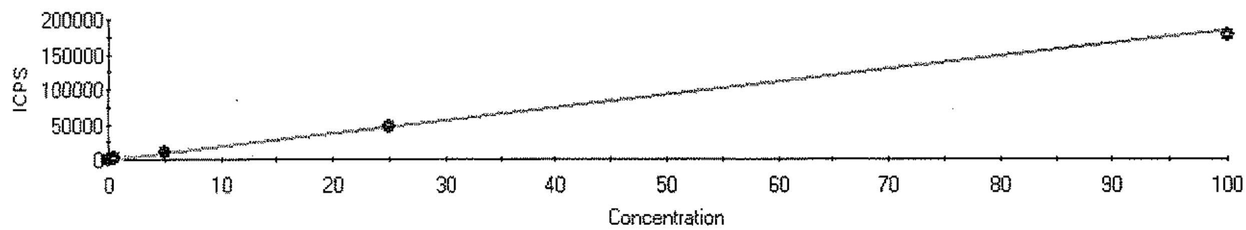
Fully Quant Calibration 98Mo FQ Block 1



Intercept CPS=39.735492 Intercept Conc=0.047818
Sensitivity=830.978008 Correlation Coeff=0.999751

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.01	0.01	50.42	
Cal 1	2.00	1.96	-0.04	1,664.64	-0.04
Cal 2	20.00	20.07	0.07	16,715.63	0.07
Cal 3	100.00	101.83	1.83	84,657.87	1.83
Cal 4	400.00	395.44	-4.56	328,638.31	-4.56

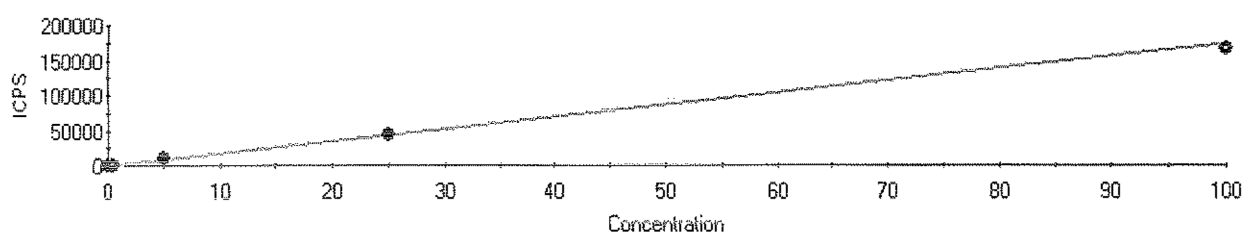
Fully Quant Calibration 107Ag FQ Block 1



Intercept CPS=402.084805 Intercept Conc=0.217336
Sensitivity=1850.060147 Correlation Coeff=0.998972

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.01	-0.01	388.49	
Cal 1	0.50	0.51	0.01	1,336.99	0.01
Cal 2	5.00	5.04	0.04	9,733.49	0.04
Cal 3	25.00	25.25	0.25	47,108.58	0.25
Cal 4	100.00	95.26	-4.74	176,636.60	-4.74

Fully Quant Calibration 109Ag FQ Block 1

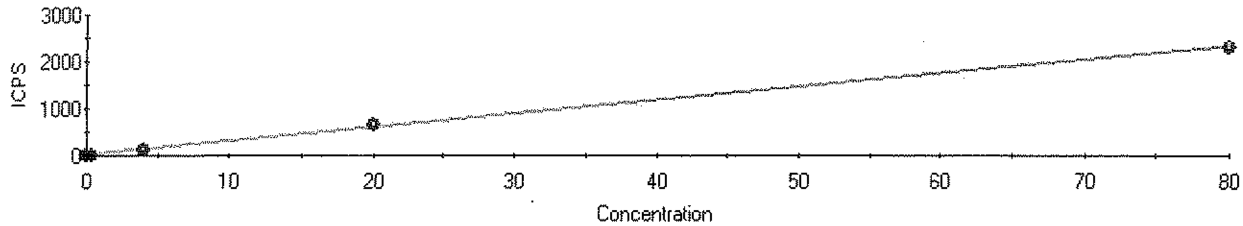


Intercept CPS=375.703742 Intercept Conc=0.215782
Sensitivity=1741.127113 Correlation Coeff=0.998183

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	374.41	
Cal 1	0.50	0.49	-0.01	1,232.07	-0.01

Cal 2	5.00	5.12	0.12	9,287.63	0.12
Cal 3	25.00	25.25	0.25	44,347.44	0.25
Cal 4	100.00	96.02	-3.98	167,550.40	-3.98

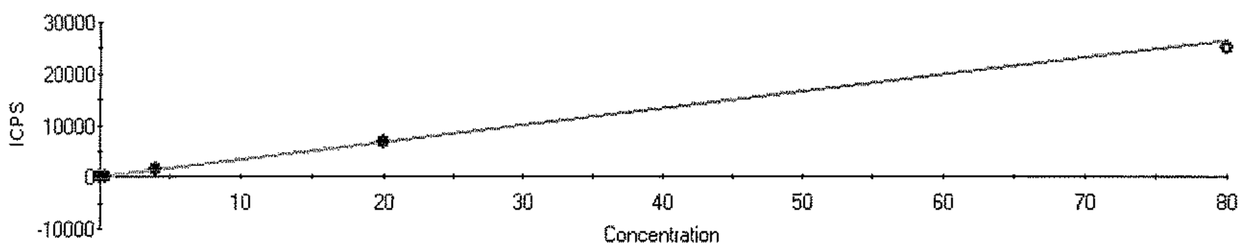
Fully Quant Calibration 106Cd FQ Block 1



Intercept CPS=21.343632 Intercept Conc=0.735756
Sensitivity=29.009121 Correlation Coeff=0.998613

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.71	-0.71	0.86	
Cal 1	0.40	-0.44	-0.84	8.49	-0.84
Cal 2	4.00	3.88	-0.12	133.77	-0.12
Cal 3	20.00	22.22	2.22	665.85	2.22
Cal 4	80.00	79.46	-0.54	2,326.29	-0.54

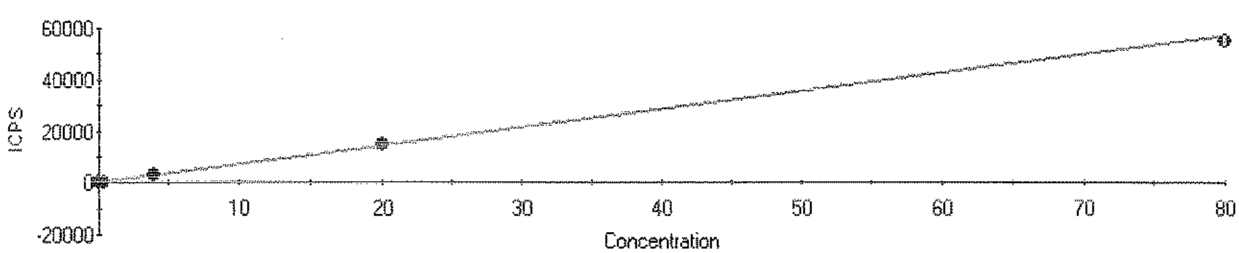
Fully Quant Calibration 111Cd FQ Block 1



Intercept CPS=3.651853 Intercept Conc=0.011068
Sensitivity=329.938513 Correlation Coeff=0.999809

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	3.12	
Cal 1	0.40	0.36	-0.04	121.68	-0.04
Cal 2	4.00	4.19	0.19	1,387.30	0.19
Cal 3	20.00	20.04	0.04	6,614.86	0.04
Cal 4	80.00	75.79	-4.21	25,009.26	-4.21

Fully Quant Calibration 114Cd FQ Block 1

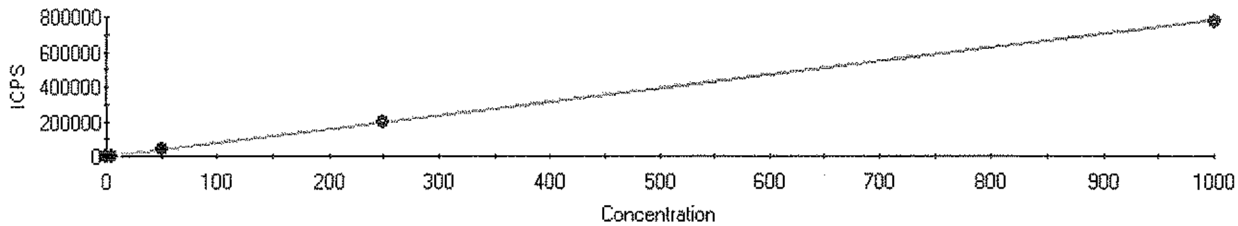


Intercept CPS=-0.477968 Intercept Conc=-0.000667
Sensitivity=717.122370 Correlation Coeff=0.996142

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	0.06	

Cal 1	0.40	0.37	-0.03	264.21	-0.03
Cal 2	4.00	4.09	0.09	2,930.90	0.09
Cal 3	20.00	20.18	0.18	14,471.76	0.18
Cal 4	80.00	76.43	-3.57	54,809.91	-3.57

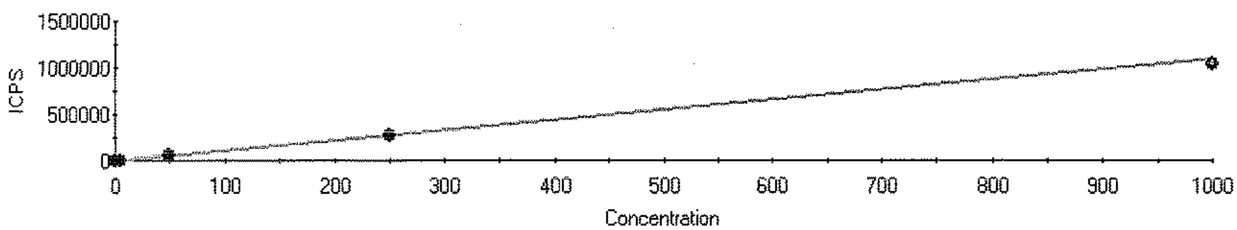
Fully Quant Calibration 118Sn FQ Block 1



Intercept CPS=200.947327 Intercept Conc=0.257258
Sensitivity=781.112639 Correlation Coeff=0.996465

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	199.11	
Cal 1	5.00	5.21	0.21	4,267.22	0.21
Cal 2	50.00	50.70	0.70	39,806.28	0.70
Cal 3	250.00	252.75	2.75	197,629.53	2.75
Cal 4	1,000.00	980.34	-19.66	765,956.21	-19.66

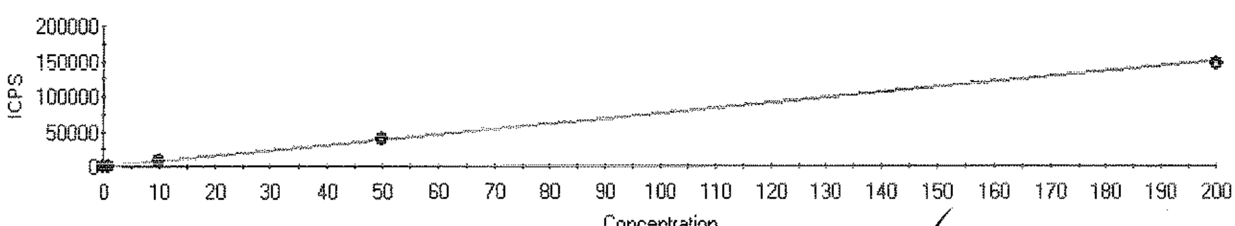
Fully Quant Calibration 120Sn FQ Block 1



Intercept CPS=266.872583 Intercept Conc=0.245289
Sensitivity=1087.994464 Correlation Coeff=0.999836

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	265.72	
Cal 1	5.00	5.06	0.06	5,769.99	0.06
Cal 2	50.00	50.09	0.09	54,763.32	0.09
Cal 3	250.00	249.36	-0.64	271,570.58	-0.64
Cal 4	1,000.00	951.04	-48.96	1,034,994.78	-48.96

Fully Quant Calibration 121Sb FQ Block 1



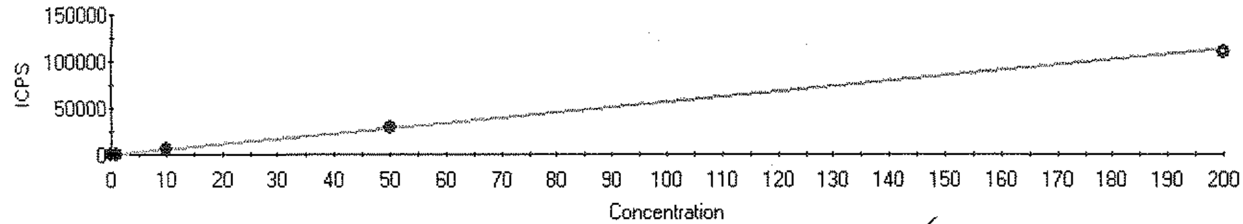
Intercept CPS=33.335747 Intercept Conc=0.043863
Sensitivity=759.993981 Correlation Coeff=0.999506

Label	Defined	Measured	Error	Mean CPS	%Error

381

Cal Blank	0.00	0.00	0.00	33.34	
Cal 1	1.00	0.98	-0.02	780.39	-0.02
Cal 2	10.00	10.05	0.05	7,674.48	0.05
Cal 3	50.00	49.68	-0.32	37,791.46	-0.32
Cal 4	200.00	191.48	-8.52	145,559.94	-8.52

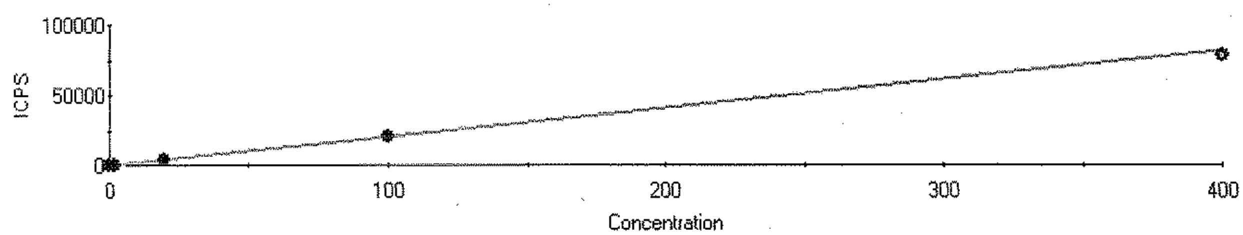
Fully Quant Calibration 123Sb FQ Block 1



Intercept CPS=16.386193 Intercept Conc=0.029065
Sensitivity=563.787079 Correlation Coeff=0.998677

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.01	-0.01	13.37	
Cal 1	1.00	1.12	0.12	645.17	0.12
Cal 2	10.00	10.22	0.22	5,780.68	0.22
Cal 3	50.00	50.60	0.60	28,545.81	0.60
Cal 4	200.00	194.29	-5.71	109,553.83	-5.71

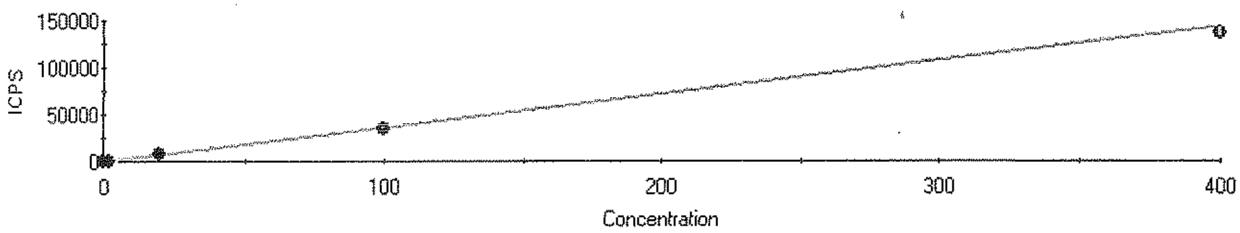
Fully Quant Calibration 135Ba FQ Block 1



Intercept CPS=9.730983 Intercept Conc=0.047473
Sensitivity=204.979726 Correlation Coeff=0.998497

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.01	-0.01	8.57	
Cal 1	2.00	2.14	0.14	447.96	0.14
Cal 2	20.00	19.93	-0.07	4,095.86	-0.07
Cal 3	100.00	100.63	0.63	20,636.77	0.63
Cal 4	400.00	381.64	-18.36	78,237.35	-18.36

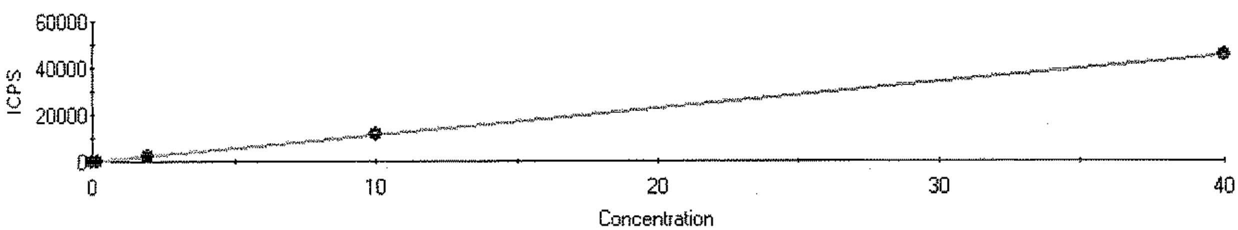
Fully Quant Calibration 137Ba FQ Block 1



Intercept CPS=14.975181 Intercept Conc=0.041460
Sensitivity=361.198038 Correlation Coeff=0.999195

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	14.50	
Cal 1	2.00	2.05	0.05	755.63	0.05
Cal 2	20.00	20.26	0.26	7,334.56	0.26
Cal 3	100.00	97.85	-2.15	35,359.92	-2.15
Cal 4	400.00	379.23	-20.77	136,993.28	-20.77

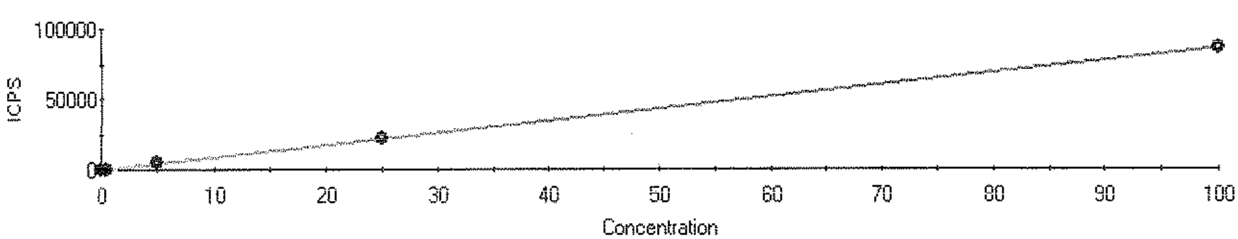
Fully Quant Calibration 203Tl FQ Block 1



Intercept CPS=6.016949 Intercept Conc=0.005298
Sensitivity=1135.661400 Correlation Coeff=0.999871

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	5.98	
Cal 1	0.20	0.20	0.00	238.78	0.00
Cal 2	2.00	2.01	0.01	2,285.72	0.01
Cal 3	10.00	10.17	0.17	11,556.27	0.17
Cal 4	40.00	39.76	-0.24	45,162.61	-0.24

Fully Quant Calibration 206Pb FQ Block 1



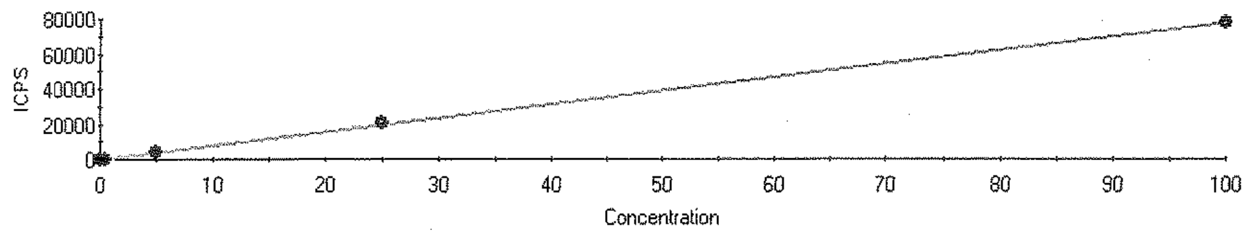
Intercept CPS=197.715747 Intercept Conc=0.229866
Sensitivity=860.134181 Correlation Coeff=0.999942

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.20	-0.20	22.28	
Cal 1	0.50	0.27	-0.23	432.00	-0.23
Cal 2	5.00	5.01	0.01	4,510.38	0.01
Cal 3	25.00	25.56	0.56	22,179.53	0.56

383

Cal 4	100.00	99.86	-0.14	86,091.90	-0.14

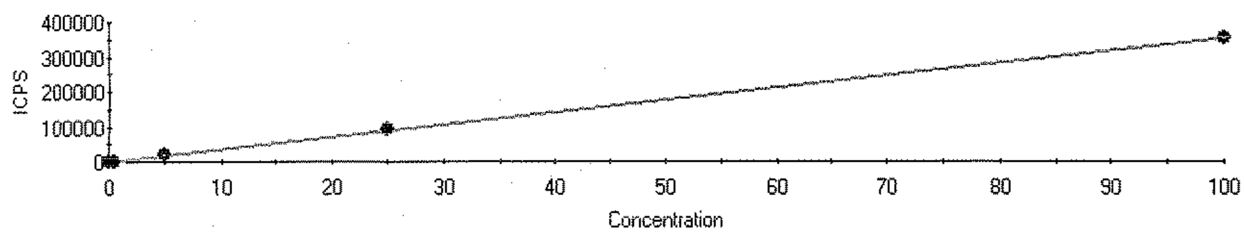
Fully Quant Calibration 207Pb FQ Block 1



Intercept CPS=324.399352 Intercept Conc=0.418251
Sensitivity=775.609205 Correlation Coeff=0.999748

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.40	-0.40	15.46	
Cal 1	0.50	0.13	-0.37	422.67	-0.37
Cal 2	5.00	4.87	-0.13	4,099.22	-0.13
Cal 3	25.00	26.19	1.19	20,641.42	1.19
Cal 4	100.00	99.71	-0.29	77,660.23	-0.29

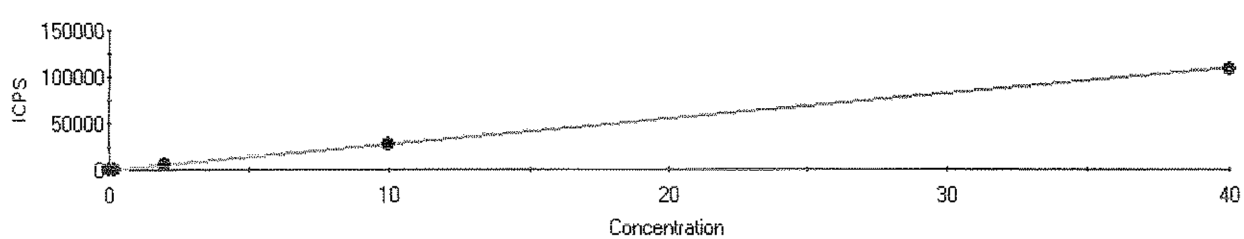
Fully Quant Calibration 208Pb FQ Block 1



Intercept CPS=987.145207 Intercept Conc=0.280975
Sensitivity=3513.287571 Correlation Coeff=0.999876

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.26	-0.26	74.44	
Cal 1	0.50	0.25	-0.25	1,853.13	-0.25
Cal 2	5.00	4.87	-0.13	18,113.63	-0.13
Cal 3	25.00	25.84	0.84	91,775.15	0.84
Cal 4	100.00	99.80	-0.20	351,603.40	-0.20

Fully Quant Calibration 205Tl FQ Block 1



Intercept CPS=16.196350 Intercept Conc=0.005944
Sensitivity=2724.660616 Correlation Coeff=0.998634

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	15.39	
Cal 1	0.20	0.22	0.02	608.08	0.02
Cal 2	2.00	2.01	0.01	5,500.32	0.01

384

Cal 3	10.00	10.11	0.11	27,554.98	0.11
Cal 4	40.00	39.26	-0.74	106,999.76	-0.74

ICP-MS INTERNAL STANDARD SUMMARY SHEET

Data File ID: 032614B

Analyte:	9Be	27Al	47Ti	48Ti	51V	52Cr	55Mn	59Co	60Ni	62Ni	63Cu	65Cu
I.S. Used:	45Sc	45Sc	45Sc	45Sc	45Sc	45Sc	71Ga	71Ga	71Ga	71Ga	71Ga	71Ga

Analyte:	66Zn	68Zn	75As	78Se	82Se	86Sr	88Sr	97Mo	98Mo	107Ag	109Ag	111Cd
I.S. Used:	71Ga	71Ga	71Ga	71Ga	71Ga	71Ga	71Ga	115In	115In	115In	115In	115In

Analyte:	114Cd	118Sn	120Sn	121Sb	123Sb	135Ba	137Ba	203Tl	205Tl	208Pb
I.S. Used:	115In	159Tb	159Tb	159Tb	159Tb	159Tb	159Tb	175Lu	175Lu	175Lu

Sample ID	Method	Recovery Limits	Internal Standards 6Li Rec	45Sc Rec	71Ga Rec	115In Rec	159Tb Rec	175Lu Rec	209Bi Rec	Anal Date / Time
Cal Blank	N/A	80-120%	100.3%	99.7%	99.2%	100.3%	98.8%	98.1%	99.0%	3/26/2014 22:43
Cal 1	N/A	80-120%	98.2%	100.5%	100.8%	99.5%	97.0%	100.6%	100.2%	3/26/2014 22:48
Cal 2	N/A	80-120%	100.4%	98.4%	102.4%	98.4%	98.6%	98.5%	99.3%	3/26/2014 22:53
Cal 3	N/A	80-120%	98.5%	97.3%	100.8%	100.4%	98.6%	102.0%	100.4%	3/26/2014 22:58
Cal 4	N/A	80-120%	98.4%	92.3%	96.2%	97.0%	93.5%	97.0%	90.7%	3/26/2014 23:03
ICV	N/A	80-120%	97.7%	95.3%	97.9%	98.3%	97.2%	98.2%	94.6%	3/26/2014 23:08
ICB	N/A	80-120%	98.7%	95.6%	95.1%	96.0%	93.5%	96.9%	96.4%	3/26/2014 23:13
MRL	N/A	80-120%	95.8%	95.3%	96.9%	98.9%	93.9%	99.8%	97.4%	3/26/2014 23:18
ICSA	N/A	80-120%	80.3%	83.2%	75.5%	81.5%	84.0%	85.7%	74.5%	3/26/2014 23:23
ICSAB	N/A	80-120%	85.6%	82.9%	80.3%	83.5%	86.4%	85.3%	75.0%	3/26/2014 23:28
CCV-1	N/A	80-120%	103.0%	99.5%	101.9%	102.4%	99.5%	103.2%	104.5%	3/26/2014 23:33
CCB-1	N/A	80-120%	98.4%	100.1%	100.9%	100.8%	100.8%	103.2%	101.2%	3/26/2014 23:38
MB-02133-04	200.8	60-125%	103.7%	103.4%	101.8%	103.8%	103.0%	102.6%	101.8%	3/26/2014 23:43
LCS-02133-03	200.8	60-125%	107.3%	100.6%	103.4%	104.9%	102.5%	103.1%	102.1%	3/26/2014 23:48
J1402003-001	200.8	60-125%	97.5%	99.7%	100.7%	100.0%	99.8%	98.7%	99.9%	3/26/2014 23:53
J1402003-002	200.8	60-125%	98.0%	99.5%	100.9%	102.9%	99.3%	103.2%	103.6%	3/26/2014 23:58
J1402003-003	200.8	60-125%	101.6%	98.5%	99.4%	98.3%	99.5%	101.4%	102.5%	3/27/2014 0:03
J1402003-004	200.8	60-125%	102.9%	99.7%	101.4%	102.4%	103.1%	105.2%	103.3%	3/27/2014 0:08
J1402025-001	6020	30-120%	100.1%	100.1%	97.8%	97.2%	99.2%	105.4%	97.7%	3/27/2014 0:13
J1402025-002	6020	30-120%	100.9%	96.3%	94.4%	94.8%	96.6%	101.5%	96.3%	3/27/2014 0:18
J1402025-003	6020	30-120%	100.9%	97.7%	96.4%	98.3%	96.8%	104.0%	98.3%	3/27/2014 0:23
J1402025-004	6020	30-120%	102.4%	96.4%	93.4%	92.0%	96.7%	101.4%	96.9%	3/27/2014 0:28
CCV-2	N/A	80-120%	101.2%	95.1%	99.6%	98.1%	101.5%	105.8%	107.4%	3/27/2014 0:33
CCB-2	N/A	80-120%	97.8%	94.2%	95.7%	96.2%	99.5%	100.9%	100.2%	3/27/2014 0:38
J1402025-005	6020	30-120%	100.9%	95.8%	95.7%	93.8%	97.9%	103.0%	97.3%	3/27/2014 0:43
J1402025-006	6020	30-120%	100.8%	97.3%	98.3%	98.9%	103.0%	104.6%	100.4%	3/27/2014 0:49
J1402026-001	6020	30-120%	92.7%	89.4%	87.2%	89.5%	94.2%	95.9%	92.3%	3/27/2014 0:54
J1402026-001S	6020	30-120%	96.3%	90.7%	88.0%	90.3%	94.0%	95.4%	88.3%	3/27/2014 0:59
J1402026-001SD	6020	30-120%	96.9%	92.6%	88.4%	90.7%	92.3%	97.2%	92.1%	3/27/2014 1:04
J1402026-001L	6020	30-120%	101.8%	93.1%	92.7%	91.7%	95.1%	98.3%	97.3%	3/27/2014 1:09
J1402026-001A	6020	30-120%	95.3%	93.1%	90.3%	89.5%	94.7%	98.5%	88.8%	3/27/2014 1:14
J1402026-002	6020	30-120%	88.9%	86.8%	77.2%	77.8%	86.4%	89.0%	73.0%	3/27/2014 1:19
J1402026-003	6020	30-120%	86.1%	87.6%	77.0%	79.5%	86.7%	89.9%	71.1%	3/27/2014 1:24
J1402026-004	6020	30-120%	85.4%	89.1%	82.0%	84.6%	90.9%	90.6%	80.3%	3/27/2014 1:29
CCV-3	N/A	80-120%	100.6%	99.4%	99.7%	101.3%	102.4%	102.7%	103.4%	3/27/2014 1:34
CCB-3	N/A	80-120%	97.8%	98.1%	98.4%	100.1%	99.5%	99.7%	100.4%	3/27/2014 1:39
J1402026-005	6020	30-120%	85.4%	90.3%	76.6%	78.8%	84.6%	87.3%	69.7%	3/27/2014 1:44
J1402026-006	6020	30-120%	81.6%	85.7%	74.9%	76.1%	79.8%	84.7%	68.7%	3/27/2014 1:49
CCV-4	N/A	80-120%	95.4%	98.2%	103.6%	102.2%	100.9%	104.2%	103.4%	3/27/2014 1:54
CCB-4	N/A	80-120%	97.0%	99.1%	98.6%	99.5%	98.3%	100.5%	101.8%	3/27/2014 1:59

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
Cal Blank	Y	**9Be**	0.00	1	99.7	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**27Al**	0.00	1	99.7	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**47Ti**	0.01	1	99.7	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	48Ti	0.01	1	99.7	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**51V**	-0.34	1	99.7	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**52Cr**	0.02	1	99.7	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**55Mn**	0.00	1	99.2	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**59Co**	0.00	1	99.2	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**60Ni**	0.01	1	99.2	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	62Ni	-0.02	1	99.2	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	63Cu	-0.01	1	99.2	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**65Cu**	-0.01	1	99.2	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**66Zn**	0.03	1	99.2	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	68Zn	0.01	1	99.2	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**75As**	-0.35	1	99.2	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**78Se**	0.04	1	99.2	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	82Se	-0.01	1	99.2	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**86Sr**	0.00	1	99.2	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	88Sr	0.00	1	99.2	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	97Mo	0.00	1	100.3	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**98Mo**	0.01	1	100.3	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	107Ag	-0.01	1	100.3	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**109Ag**	0.00	1	100.3	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	111Cd	0.00	1	100.3	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**114Cd**	0.00	1	100.3	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**118Sn**	0.00	1	98.8	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	120Sn	0.00	1	98.8	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	121Sb	0.00	1	98.8	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**123Sb**	-0.01	1	98.8	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	135Ba	-0.01	1	98.8	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**137Ba**	0.00	1	98.8	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	203Tl	0.00	1	98.1	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**205Tl**	0.00	1	98.1	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal Blank	Y	**208Pb**	-0.26	1	98.1	3/26/2014	22:43	ICAL	ICAL	N/A	
Cal 1	Y	**9Be**	0.48	1	100.5	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**27Al**	47.62	1	100.5	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**47Ti**	4.70	1	100.5	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	48Ti	4.90	1	100.5	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**51V**	2.36	1	100.5	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**52Cr**	0.99	1	100.5	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**55Mn**	1.97	1	100.8	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**59Co**	0.95	1	100.8	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**60Ni**	1.96	1	100.8	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	62Ni	2.08	1	100.8	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	63Cu	1.00	1	100.8	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**65Cu**	1.04	1	100.8	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**66Zn**	4.73	1	100.8	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	68Zn	4.99	1	100.8	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**75As**	0.40	1	100.8	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**78Se**	1.87	1	100.8	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	82Se	1.84	1	100.8	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**86Sr**	1.94	1	100.8	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	88Sr	2.01	1	100.8	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	97Mo	1.89	1	99.5	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**98Mo**	1.96	1	99.5	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	107Ag	0.51	1	99.5	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**109Ag**	0.49	1	99.5	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	111Cd	0.36	1	99.5	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**114Cd**	0.37	1	99.5	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**118Sn**	5.21	1	97	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	120Sn	5.06	1	97	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	121Sb	0.98	1	97	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**123Sb**	1.12	1	97	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	135Ba	2.14	1	97	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**137Ba**	2.05	1	97	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	203Tl	0.21	1	100.6	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**205Tl**	0.22	1	100.6	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 1	Y	**208Pb**	0.25	1	100.6	3/26/2014	22:48	ICAL	ICAL	N/A	
Cal 2	Y	**9Be**	5.16	1	98.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	**27Al**	510.70	1	98.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	**47Ti**	50.26	1	98.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	48Ti	50.22	1	98.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	**51V**	19.95	1	98.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	**52Cr**	9.77	1	98.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	**55Mn**	20.12	1	102.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	**59Co**	9.92	1	102.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	**60Ni**	20.40	1	102.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	62Ni	20.44	1	102.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	63Cu	10.05	1	102.4	3/26/2014	22:53	ICAL	ICAL	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
Cal 2	Y	65Cu	9.84	1	102.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	66Zn	49.99	1	102.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	68Zn	51.03	1	102.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	75As	9.38	1	102.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	78Se	19.82	1	102.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	82Se	20.52	1	102.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	86Sr	20.05	1	102.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	88Sr	19.83	1	102.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	97Mo	20.40	1	98.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	98Mo	20.07	1	98.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	107Ag	5.04	1	98.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	109Ag	5.12	1	98.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	111Cd	4.19	1	98.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	114Cd	4.09	1	98.4	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	118Sn	50.70	1	98.6	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	120Sn	50.09	1	98.6	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	121Sb	10.05	1	98.6	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	123Sb	10.22	1	98.6	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	135Ba	19.93	1	98.6	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	137Ba	20.26	1	98.6	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	203Tl	2.01	1	98.5	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	205Tl	2.01	1	98.5	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 2	Y	208Pb	4.88	1	98.5	3/26/2014	22:53	ICAL	ICAL	N/A	
Cal 3	Y	9Be	25.48	1	97.3	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	27Al	2507.00	1	97.3	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	47Ti	251.30	1	97.3	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	48Ti	256.90	1	97.3	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	51V	101.20	1	97.3	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	52Cr	50.31	1	97.3	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	55Mn	103.00	1	100.8	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	59Co	50.54	1	100.8	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	60Ni	102.80	1	100.8	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	62Ni	102.10	1	100.8	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	63Cu	51.10	1	100.8	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	65Cu	50.30	1	100.8	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	66Zn	251.10	1	100.8	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	68Zn	257.50	1	100.8	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	75As	52.04	1	100.8	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	78Se	102.30	1	100.8	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	82Se	104.30	1	100.8	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	86Sr	100.80	1	100.8	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	88Sr	102.00	1	100.8	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	97Mo	101.50	1	100.4	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	98Mo	101.80	1	100.4	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	107Ag	25.25	1	100.4	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	109Ag	25.25	1	100.4	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	111Cd	20.04	1	100.4	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	114Cd	20.18	1	100.4	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	118Sn	252.80	1	98.6	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	120Sn	249.40	1	98.6	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	121Sb	49.68	1	98.6	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	123Sb	50.60	1	98.6	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	135Ba	100.60	1	98.6	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	137Ba	97.85	1	98.6	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	203Tl	10.17	1	102	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	205Tl	10.11	1	102	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 3	Y	208Pb	25.84	1	102	3/26/2014	22:58	ICAL	ICAL	N/A	
Cal 4	Y	9Be	98.91	1	92.3	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	27Al	9820.00	1	92.3	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	47Ti	988.80	1	92.3	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	48Ti	992.00	1	92.3	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	51V	393.10	1	92.3	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	52Cr	192.60	1	92.3	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	55Mn	389.90	1	96.2	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	59Co	194.60	1	96.2	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	60Ni	391.30	1	96.2	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	62Ni	397.60	1	96.2	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	63Cu	193.40	1	96.2	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	65Cu	189.90	1	96.2	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	66Zn	952.40	1	96.2	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	68Zn	971.50	1	96.2	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	75As	199.50	1	96.2	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	78Se	388.80	1	96.2	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	82Se	399.10	1	96.2	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	86Sr	392.10	1	96.2	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	88Sr	389.00	1	96.2	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	97Mo	395.20	1	97	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	98Mo	395.40	1	97	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	107Ag	95.26	1	97	3/26/2014	23:03	ICAL	ICAL	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
Cal 4	Y	**109Ag**	96.02	1	97	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	111Cd	75.79	1	97	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	**114Cd**	76.43	1	97	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	**118Sn**	980.30	1	93.5	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	120Sn	951.00	1	93.5	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	121Sb	191.50	1	93.5	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	**123Sb**	194.30	1	93.5	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	135Ba	381.60	1	93.5	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	**137Ba**	379.20	1	93.5	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	203Tl	39.76	1	97	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	**205Tl**	39.26	1	97	3/26/2014	23:03	ICAL	ICAL	N/A	
Cal 4	Y	**208Pb**	99.80	1	97	3/26/2014	23:03	ICAL	ICAL	N/A	
ICV	Y	**9Be**	19.95	1	95.3	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**27Al**	514.50	1	95.3	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**47Ti**	245.60	1	95.3	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	48Ti	245.20	1	95.3	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**51V**	97.31	1	95.3	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**52Cr**	48.81	1	95.3	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**55Mn**	49.43	1	97.9	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**59Co**	48.38	1	97.9	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**60Ni**	49.66	1	97.9	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	62Ni	51.13	1	97.9	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	63Cu	49.43	1	97.9	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**65Cu**	49.09	1	97.9	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**66Zn**	97.43	1	97.9	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	68Zn	99.55	1	97.9	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**75As**	51.22	1	97.9	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**78Se**	49.13	1	97.9	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	82Se	50.44	1	97.9	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**86Sr**	48.67	1	97.9	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	88Sr	48.76	1	97.9	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	97Mo	49.96	1	98.3	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**98Mo**	49.63	1	98.3	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	107Ag	47.60	1	98.3	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**109Ag**	48.88	1	98.3	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	111Cd	24.00	1	98.3	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**114Cd**	23.77	1	98.3	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**118Sn**	199.40	1	97.2	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	120Sn	195.00	1	97.2	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	121Sb	48.02	1	97.2	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**123Sb**	49.40	1	97.2	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	135Ba	48.70	1	97.2	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**137Ba**	47.70	1	97.2	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	203Tl	47.63	1	98.2	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**205Tl**	48.89	1	98.2	3/26/2014	23:08	ICV	ICV	N/A	
ICV	Y	**208Pb**	49.70	1	98.2	3/26/2014	23:08	ICV	ICV	N/A	
ICB	Y	**9Be**	0.01	1	95.6	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**27Al**	0.05	1	95.6	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**47Ti**	0.03	1	95.6	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	48Ti	0.10	1	95.6	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**51V**	0.75	1	95.6	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**52Cr**	0.17	1	95.6	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**55Mn**	0.01	1	95.1	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**59Co**	0.00	1	95.1	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**60Ni**	-0.02	1	95.1	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	62Ni	0.02	1	95.1	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	63Cu	-0.02	1	95.1	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**65Cu**	-0.01	1	95.1	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**66Zn**	0.05	1	95.1	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	68Zn	-0.05	1	95.1	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**75As**	-0.51	1	95.1	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**78Se**	-0.33	1	95.1	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	82Se	-0.27	1	95.1	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**86Sr**	-0.06	1	95.1	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	88Sr	0.01	1	95.1	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	97Mo	0.34	1	96	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**98Mo**	0.36	1	96	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	107Ag	-0.02	1	96	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	109Ag	-0.01	1	96	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	111Cd	0.00	1	96	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**114Cd**	0.01	1	96	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**118Sn**	1.67	1	93.5	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	120Sn	1.62	1	93.5	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	121Sb	0.49	1	93.5	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	123Sb	0.54	1	93.5	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	135Ba	-0.02	1	93.5	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**137Ba**	0.00	1	93.5	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	203Tl	0.03	1	96.9	3/26/2014	23:13	CCB	CCB	N/A	
ICB	Y	**205Tl**	0.02	1	96.9	3/26/2014	23:13	CCB	CCB	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
ICB	Y	208Pb	-0.26	1	96.9	3/26/2014	23:13	CCB	CCB	N/A	
MRL	Y	9Be	0.48	1	95.3	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	27Al	47.60	1	95.3	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	47Ti	4.89	1	95.3	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	48Ti	5.01	1	95.3	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	51V	1.55	1	95.3	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	52Cr	1.12	1	95.3	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	55Mn	2.05	1	96.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	59Co	0.97	1	96.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	60Ni	2.02	1	96.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	62Ni	1.71	1	96.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	63Cu	1.05	1	96.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	65Cu	1.03	1	96.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	66Zn	4.83	1	96.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	68Zn	5.02	1	96.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	75As	1.07	1	96.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	78Se	1.73	1	96.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	82Se	1.71	1	96.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	86Sr	1.97	1	96.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	88Sr	2.02	1	96.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	97Mo	1.94	1	98.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	98Mo	1.98	1	98.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	107Ag	0.46	1	98.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	109Ag	0.49	1	98.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	111Cd	0.34	1	98.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	114Cd	0.38	1	98.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	118Sn	5.59	1	93.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	120Sn	5.71	1	93.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	121Sb	1.16	1	93.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	123Sb	1.13	1	93.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	135Ba	2.07	1	93.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	137Ba	1.85	1	93.9	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	203Tl	0.23	1	99.8	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	205Tl	0.20	1	99.8	3/26/2014	23:18	MRL	MRL	N/A	
MRL	Y	208Pb	0.27	1	99.8	3/26/2014	23:18	MRL	MRL	N/A	
ICSA	Y	9Be	0.02	1	83.2	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	27Al	50690.00	1	83.2	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	47Ti	1140.00	1	83.2	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	48Ti	1080.00	1	83.2	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	51V	-0.53	1	83.2	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	52Cr	1.07	1	83.2	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	N	55Mn	0.41	1	75.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	IS FL,
ICSA	N	59Co	0.10	1	75.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	IS FL,
ICSA	N	60Ni	1.02	1	75.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	IS FL,
ICSA	N	62Ni	4.54	1	75.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	IS FL, ICS-A FH,
ICSA	N	63Cu	0.80	1	75.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	IS FL,
ICSA	N	65Cu	0.76	1	75.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	IS FL,
ICSA	N	66Zn	1.62	1	75.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	IS FL,
ICSA	N	68Zn	0.70	1	75.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	IS FL,
ICSA	N	75As	-0.55	1	75.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	IS FL,
ICSA	N	78Se	0.05	1	75.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	IS FL,
ICSA	N	82Se	-2.07	1	75.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	IS FL,
ICSA	N	86Sr	0.07	1	75.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	IS FL,
ICSA	N	88Sr	0.40	1	75.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	IS FL,
ICSA	Y	97Mo	1067.00	1	81.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	98Mo	1099.00	1	81.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	107Ag	-0.01	1	81.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	109Ag	-0.01	1	81.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	111Cd	0.08	1	81.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	114Cd	0.08	1	81.5	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	118Sn	0.40	1	84	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	120Sn	0.40	1	84	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	121Sb	0.12	1	84	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	123Sb	0.15	1	84	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	135Ba	0.06	1	84	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	137Ba	0.07	1	84	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	203Tl	0.01	1	85.7	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	205Tl	0.01	1	85.7	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSA	Y	208Pb	-0.15	1	85.7	3/26/2014	23:23	ICS-A	ICS-A	N/A	
ICSAB	Y	9Be	9.63	1	82.9	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	27Al	52100.00	1	82.9	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	47Ti	1248.00	1	82.9	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	48Ti	1199.00	1	82.9	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	51V	40.09	1	82.9	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	52Cr	22.05	1	82.9	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	55Mn	41.18	1	80.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	59Co	20.72	1	80.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	60Ni	40.97	1	80.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	62Ni	45.25	1	80.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
ICSAB	Y	63Cu	19.99	1	80.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	**65Cu**	19.95	1	80.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	**66Zn**	97.54	1	80.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	68Zn	99.36	1	80.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	**75As**	21.68	1	80.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	**78Se**	41.10	1	80.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	82Se	41.51	1	80.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	**86Sr**	43.99	1	80.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	88Sr	44.99	1	80.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	97Mo	1147.00	1	83.5	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	**98Mo**	1150.00	1	83.5	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	107Ag	9.56	1	83.5	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	**109Ag**	9.40	1	83.5	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	111Cd	7.65	1	83.5	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	**114Cd**	7.57	1	83.5	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	**118Sn**	104.50	1	86.4	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	120Sn	101.80	1	86.4	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	121Sb	20.40	1	86.4	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	**123Sb**	21.04	1	86.4	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	135Ba	40.87	1	86.4	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	**137Ba**	42.10	1	86.4	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	203Tl	3.99	1	85.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	**205Tl**	4.04	1	85.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
ICSAB	Y	**208Pb**	10.02	1	85.3	3/26/2014	23:28	ICS-AB	ICS-AB	N/A	
CCV-1	Y	**9Be**	24.56	1	99.5	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**27Al**	2512.00	1	99.5	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**47Ti**	246.90	1	99.5	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	48Ti	253.30	1	99.5	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**51V**	98.89	1	99.5	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**52Cr**	49.53	1	99.5	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**55Mn**	101.10	1	101.9	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**59Co**	49.95	1	101.9	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**60Ni**	101.70	1	101.9	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	N	62Ni	103.60	1	101.9	3/26/2014	23:33	CCV	CCV	N/A	ICS-A FH,
CCV-1	Y	63Cu	50.93	1	101.9	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**65Cu**	50.04	1	101.9	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**66Zn**	248.90	1	101.9	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	68Zn	257.00	1	101.9	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**75As**	51.20	1	101.9	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**78Se**	100.90	1	101.9	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	82Se	104.10	1	101.9	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**86Sr**	100.20	1	101.9	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	88Sr	100.50	1	101.9	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	97Mo	102.90	1	102.4	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**98Mo**	103.20	1	102.4	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	107Ag	25.07	1	102.4	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**109Ag**	25.63	1	102.4	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	111Cd	19.47	1	102.4	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**114Cd**	19.53	1	102.4	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**118Sn**	251.80	1	99.5	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	120Sn	251.00	1	99.5	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	121Sb	49.94	1	99.5	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**123Sb**	50.16	1	99.5	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	135Ba	100.20	1	99.5	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**137Ba**	97.78	1	99.5	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	203Tl	10.38	1	103.2	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**205Tl**	10.30	1	103.2	3/26/2014	23:33	CCV	CCV	N/A	
CCV-1	Y	**208Pb**	26.09	1	103.2	3/26/2014	23:33	CCV	CCV	N/A	
CCB-1	Y	**9Be**	0.01	1	100.1	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**27Al**	0.41	1	100.1	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**47Ti**	0.15	1	100.1	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	48Ti	0.13	1	100.1	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**51V**	0.39	1	100.1	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**52Cr**	0.16	1	100.1	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**55Mn**	0.01	1	100.9	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**59Co**	0.00	1	100.9	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**60Ni**	0.00	1	100.9	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	N	62Ni	0.10	1	100.9	3/26/2014	23:38	CCB	CCB	N/A	ICS-A FH,
CCB-1	Y	63Cu	0.00	1	100.9	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**65Cu**	-0.02	1	100.9	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**66Zn**	0.08	1	100.9	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	68Zn	-0.02	1	100.9	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**75As**	-0.60	1	100.9	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**78Se**	-0.18	1	100.9	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	82Se	-0.22	1	100.9	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**86Sr**	-0.01	1	100.9	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	88Sr	0.03	1	100.9	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	97Mo	0.59	1	100.8	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**98Mo**	0.59	1	100.8	3/26/2014	23:38	CCB	CCB	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
CCB-1	Y	107Ag	-0.03	1	100.8	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**109Ag**	-0.04	1	100.8	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	111Cd	0.00	1	100.8	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**114Cd**	0.02	1	100.8	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**118Sn**	0.86	1	100.8	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	120Sn	0.83	1	100.8	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	121Sb	0.17	1	100.8	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**123Sb**	0.15	1	100.8	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	135Ba	0.02	1	100.8	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**137Ba**	0.00	1	100.8	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	203Tl	0.02	1	103.2	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**205Tl**	0.02	1	103.2	3/26/2014	23:38	CCB	CCB	N/A	
CCB-1	Y	**208Pb**	-0.26	1	103.2	3/26/2014	23:38	CCB	CCB	N/A	
MB-02133-04	Y	**9Be**	0.00	1	103.4	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**27Al**	9.70	1	103.4	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**47Ti**	0.25	1	103.4	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	N	48Ti	0.22	1	103.4	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**51V**	0.53	1	103.4	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**52Cr**	0.20	1	103.4	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**55Mn**	0.08	1	101.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**59Co**	0.00	1	101.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**60Ni**	0.00	1	101.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	N	62Ni	0.10	1	101.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	ICS-A FH,
MB-02133-04	N	63Cu	-0.01	1	101.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**65Cu**	-0.01	1	101.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**66Zn**	3.21	1	101.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	N	68Zn	2.97	1	101.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**75As**	-0.52	1	101.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**78Se**	0.12	1	101.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	N	82Se	-0.27	1	101.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**86Sr**	0.29	1	101.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	N	88Sr	0.24	1	101.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	N	97Mo	0.35	1	103.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**98Mo**	0.39	1	103.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	N	107Ag	-0.04	1	103.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**109Ag**	-0.03	1	103.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	N	111Cd	-0.01	1	103.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**114Cd**	0.02	1	103.8	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**118Sn**	0.42	1	103	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	N	120Sn	0.37	1	103	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	N	121Sb	0.21	1	103	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**123Sb**	0.25	1	103	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	N	135Ba	0.04	1	103	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**137Ba**	0.06	1	103	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	N	203Tl	0.01	1	102.6	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**205Tl**	0.01	1	102.6	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
MB-02133-04	Y	**208Pb**	-0.25	1	102.6	3/26/2014	23:43	MBLK	JQ1402133-04	200.8 D	
LCS-02133-03	Y	**9Be**	25.09	1	100.6	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**27Al**	2578.00	1	100.6	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**47Ti**	257.70	1	100.6	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	N	48Ti	260.50	1	100.6	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**51V**	102.90	1	100.6	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**52Cr**	50.93	1	100.6	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**55Mn**	103.70	1	103.4	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**59Co**	51.30	1	103.4	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**60Ni**	104.30	1	103.4	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	N	62Ni	104.40	1	103.4	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	ICS-A FH,
LCS-02133-03	N	63Cu	52.01	1	103.4	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**65Cu**	51.18	1	103.4	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**66Zn**	251.30	1	103.4	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	N	68Zn	258.60	1	103.4	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**75As**	52.08	1	103.4	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**78Se**	100.40	1	103.4	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	N	82Se	103.10	1	103.4	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**86Sr**	103.00	1	103.4	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	N	88Sr	104.40	1	103.4	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	N	97Mo	103.90	1	104.9	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**98Mo**	102.90	1	104.9	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	N	107Ag	25.71	1	104.9	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**109Ag**	26.07	1	104.9	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	N	111Cd	19.76	1	104.9	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**114Cd**	19.80	1	104.9	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**118Sn**	256.50	1	102.5	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	N	120Sn	254.10	1	102.5	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	N	121Sb	50.98	1	102.5	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**123Sb**	52.36	1	102.5	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	N	135Ba	102.00	1	102.5	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	**137Ba**	100.60	1	102.5	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	N	203Tl	10.62	1	103.1	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
LCS-02133-03	Y	205Tl	10.49	1	103.1	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
LCS-02133-03	Y	208Pb	27.12	1	103.1	3/26/2014	23:48	LCS	JQ1402133-03	200.8 D	
J1402003-001	Y	9Be	0.03	1	99.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	27Al	67.35	1	99.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	47Ti	0.30	1	99.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	N	48Ti	1.59	1	99.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	51V	0.76	1	99.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	52Cr	0.48	1	99.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	55Mn	54.23	1	100.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	59Co	0.62	1	100.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	60Ni	0.28	1	100.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	N	62Ni	0.26	1	100.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	ICS-A FH.
J1402003-001	N	63Cu	0.46	1	100.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	65Cu	0.44	1	100.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	66Zn	5.82	1	100.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	N	68Zn	6.90	1	100.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	75As	-0.30	1	100.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	78Se	-0.10	1	100.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	N	82Se	-0.27	1	100.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	86Sr	11.02	1	100.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	N	88Sr	11.23	1	100.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	N	97Mo	0.50	1	100	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	98Mo	0.45	1	100	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	N	107Ag	-0.03	1	100	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	109Ag	-0.01	1	100	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	N	111Cd	0.00	1	100	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	114Cd	0.02	1	100	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	118Sn	0.94	1	99.8	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	N	120Sn	0.88	1	99.8	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	N	121Sb	0.08	1	99.8	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	123Sb	0.10	1	99.8	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	N	135Ba	17.95	1	99.8	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	137Ba	17.82	1	99.8	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	N	203Tl	0.07	1	98.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	205Tl	0.06	1	98.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-001	Y	208Pb	-0.24	1	98.7	3/26/2014	23:53	SAMP	J1402003-001	200.8 D	
J1402003-002	Y	9Be	0.02	1	99.5	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	27Al	146.30	1	99.5	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	47Ti	0.51	1	99.5	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	N	48Ti	1.68	1	99.5	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	51V	0.73	1	99.5	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	52Cr	0.35	1	99.5	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	55Mn	49.34	1	100.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	59Co	1.18	1	100.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	60Ni	0.43	1	100.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	N	62Ni	0.47	1	100.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	ICS-A FH.
J1402003-002	N	63Cu	0.62	1	100.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	65Cu	0.55	1	100.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	66Zn	8.11	1	100.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	N	68Zn	9.27	1	100.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	75As	0.05	1	100.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	78Se	0.30	1	100.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	N	82Se	-0.44	1	100.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	86Sr	11.44	1	100.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	N	88Sr	11.30	1	100.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	N	97Mo	0.21	1	102.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	98Mo	0.18	1	102.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	N	107Ag	-0.05	1	102.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	109Ag	-0.04	1	102.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	N	111Cd	0.01	1	102.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	114Cd	0.02	1	102.9	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	118Sn	0.32	1	99.3	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	N	120Sn	0.34	1	99.3	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	N	121Sb	0.04	1	99.3	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	123Sb	0.03	1	99.3	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	N	135Ba	16.76	1	99.3	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	137Ba	17.26	1	99.3	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	N	203Tl	0.02	1	103.2	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	205Tl	0.02	1	103.2	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-002	Y	208Pb	-0.24	1	103.2	3/26/2014	23:58	SAMP	J1402003-002	200.8 D	
J1402003-003	Y	9Be	0.03	1	98.5	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	27Al	148.40	1	98.5	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	47Ti	0.27	1	98.5	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	N	48Ti	0.41	1	98.5	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	51V	0.40	1	98.5	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	52Cr	0.19	1	98.5	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	55Mn	8.65	1	99.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	59Co	0.80	1	99.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	60Ni	0.29	1	99.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402003-003	N	62Ni	0.11	1	99.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	ICS-A FH,
J1402003-003	N	63Cu	0.43	1	99.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	**65Cu**	0.41	1	99.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	**66Zn**	5.07	1	99.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	N	68Zn	5.59	1	99.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	**75As**	-0.19	1	99.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	**78Se**	-0.15	1	99.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	N	82Se	-0.22	1	99.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	**86Sr**	4.18	1	99.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	N	88Sr	4.35	1	99.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	N	97Mo	0.14	1	98.3	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	**98Mo**	0.10	1	98.3	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	N	107Ag	-0.05	1	98.3	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	**109Ag**	-0.02	1	98.3	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	N	111Cd	0.02	1	98.3	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	**114Cd**	0.02	1	98.3	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	**118Sn**	0.16	1	99.5	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	N	120Sn	0.17	1	99.5	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	N	121Sb	0.02	1	99.5	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	**123Sb**	0.01	1	99.5	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	N	135Ba	7.68	1	99.5	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	**137Ba**	7.78	1	99.5	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	N	203Tl	0.01	1	101.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	**205Tl**	0.01	1	101.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-003	Y	**208Pb**	-0.25	1	101.4	3/27/2014	0:03	SAMP	J1402003-003	200.8 D	
J1402003-004	Y	**9Be**	0.03	1	99.7	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**27Al**	142.10	1	99.7	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**47Ti**	0.21	1	99.7	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	N	48Ti	0.34	1	99.7	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**51V**	0.41	1	99.7	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**52Cr**	0.15	1	99.7	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**55Mn**	8.18	1	101.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**59Co**	0.88	1	101.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**60Ni**	0.26	1	101.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	N	62Ni	0.23	1	101.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	ICS-A FH,
J1402003-004	N	63Cu	0.42	1	101.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**65Cu**	0.40	1	101.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**66Zn**	5.06	1	101.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	N	68Zn	5.97	1	101.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**75As**	-0.03	1	101.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**78Se**	-0.15	1	101.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	N	82Se	-0.41	1	101.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**86Sr**	4.31	1	101.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	N	88Sr	4.30	1	101.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	N	97Mo	0.05	1	102.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**98Mo**	0.06	1	102.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	N	107Ag	-0.05	1	102.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**109Ag**	-0.05	1	102.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	N	111Cd	0.09	1	102.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**114Cd**	-0.03	1	102.4	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**118Sn**	0.11	1	103.1	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	N	120Sn	0.11	1	103.1	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	N	121Sb	0.01	1	103.1	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**123Sb**	0.03	1	103.1	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	N	135Ba	8.80	1	103.1	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**137Ba**	8.71	1	103.1	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	N	203Tl	0.01	1	105.2	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**205Tl**	0.01	1	105.2	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402003-004	Y	**208Pb**	-0.25	1	105.2	3/27/2014	0:08	SAMP	J1402003-004	200.8 D	
J1402025-001	Y	**9Be**	0.00	1	100.1	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**27Al**	3.37	1	100.1	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**47Ti**	0.15	1	100.1	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	N	48Ti	35.91	1	100.1	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**51V**	3.15	1	100.1	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**52Cr**	-0.13	1	100.1	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**55Mn**	0.39	1	97.8	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**59Co**	0.10	1	97.8	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**60Ni**	1.51	1	97.8	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	N	62Ni	0.48	1	97.8	3/27/2014	0:13	SAMP	J1402025-001	6020 D	ICS-A FH,
J1402025-001	N	63Cu	0.48	1	97.8	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**65Cu**	0.49	1	97.8	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**66Zn**	4.94	1	97.8	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	N	68Zn	6.38	1	97.8	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**75As**	0.51	1	97.8	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**78Se**	1.03	1	97.8	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	N	82Se	0.94	1	97.8	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**86Sr**	140.30	1	97.8	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	N	88Sr	140.80	1	97.8	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	N	97Mo	2.95	1	97.2	3/27/2014	0:13	SAMP	J1402025-001	6020 D	

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SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402025-001	Y	**98Mo**	2.72	1	97.2	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	N	107Ag	-0.07	1	97.2	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**109Ag**	-0.03	1	97.2	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	N	111Cd	0.03	1	97.2	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**114Cd**	0.03	1	97.2	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**118Sn**	0.09	1	99.2	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	N	120Sn	0.06	1	99.2	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	N	121Sb	1.40	1	99.2	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**123Sb**	1.58	1	99.2	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	N	135Ba	18.46	1	99.2	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**137Ba**	17.58	1	99.2	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	N	203Tl	0.02	1	105.4	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**205Tl**	0.01	1	105.4	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-001	Y	**208Pb**	-0.22	1	105.4	3/27/2014	0:13	SAMP	J1402025-001	6020 D	
J1402025-002	Y	**9Be**	0.01	1	96.3	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**27Al**	11.39	1	96.3	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**47Ti**	0.59	1	96.3	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	N	48Ti	22.81	1	96.3	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**51V**	0.69	1	96.3	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**52Cr**	0.01	1	96.3	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**55Mn**	27.37	1	94.4	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**59Co**	0.06	1	94.4	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**60Ni**	1.11	1	94.4	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	N	62Ni	0.55	1	94.4	3/27/2014	0:18	SAMP	J1402025-002	6020 D	ICS-A FH,
J1402025-002	N	63Cu	0.17	1	94.4	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**65Cu**	0.18	1	94.4	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**66Zn**	4.91	1	94.4	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	N	68Zn	5.51	1	94.4	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**75As**	-0.03	1	94.4	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**78Se**	-0.21	1	94.4	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	N	82Se	-0.30	1	94.4	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**86Sr**	52.55	1	94.4	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	N	88Sr	52.45	1	94.4	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	N	97Mo	2.20	1	94.8	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**98Mo**	2.16	1	94.8	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	N	107Ag	-0.05	1	94.8	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**109Ag**	-0.07	1	94.8	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	N	111Cd	0.02	1	94.8	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**114Cd**	0.00	1	94.8	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**118Sn**	0.05	1	96.6	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	N	120Sn	0.05	1	96.6	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	N	121Sb	0.05	1	96.6	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**123Sb**	0.07	1	96.6	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	N	135Ba	12.22	1	96.6	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**137Ba**	11.61	1	96.6	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	N	203Tl	0.01	1	101.5	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**205Tl**	0.00	1	101.5	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-002	Y	**208Pb**	-0.25	1	101.5	3/27/2014	0:18	SAMP	J1402025-002	6020 D	
J1402025-003	Y	**9Be**	0.01	1	97.7	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**27Al**	2.90	1	97.7	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**47Ti**	0.95	1	97.7	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	N	48Ti	16.57	1	97.7	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**51V**	-0.11	1	97.7	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**52Cr**	-0.04	1	97.7	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**55Mn**	27.17	1	96.4	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**59Co**	0.05	1	96.4	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**60Ni**	0.85	1	96.4	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	N	62Ni	0.45	1	96.4	3/27/2014	0:23	SAMP	J1402025-003	6020 D	ICS-A FH,
J1402025-003	N	63Cu	0.20	1	96.4	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**65Cu**	0.20	1	96.4	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**66Zn**	4.83	1	96.4	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	N	68Zn	5.12	1	96.4	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**75As**	2.36	1	96.4	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**78Se**	0.04	1	96.4	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	N	82Se	-0.43	1	96.4	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**86Sr**	34.11	1	96.4	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	N	88Sr	34.48	1	96.4	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	N	97Mo	6.03	1	98.3	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**98Mo**	5.77	1	98.3	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	N	107Ag	-0.09	1	98.3	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**109Ag**	-0.08	1	98.3	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	N	111Cd	0.02	1	98.3	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**114Cd**	0.01	1	98.3	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**118Sn**	0.02	1	96.8	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	N	120Sn	0.04	1	96.8	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	N	121Sb	0.00	1	96.8	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**123Sb**	0.00	1	96.8	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	N	135Ba	2.45	1	96.8	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**137Ba**	2.52	1	96.8	3/27/2014	0:23	SAMP	J1402025-003	6020 D	

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SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402025-003	N	203Tl	0.00	1	104	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**205Tl**	0.00	1	104	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-003	Y	**208Pb**	-0.26	1	104	3/27/2014	0:23	SAMP	J1402025-003	6020 D	
J1402025-004	Y	**9Be**	0.01	1	96.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**27Al**	8.53	1	96.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**47Ti**	0.15	1	96.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	N	48Ti	16.30	1	96.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**51V**	1.62	1	96.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**52Cr**	0.45	1	96.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**55Mn**	62.57	1	93.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**59Co**	0.10	1	93.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**60Ni**	0.99	1	93.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	N	62Ni	0.56	1	93.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	ICS-A FH,
J1402025-004	N	63Cu	0.17	1	93.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**65Cu**	0.11	1	93.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**66Zn**	5.31	1	93.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	N	68Zn	5.67	1	93.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**75As**	3.24	1	93.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**78Se**	0.12	1	93.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	N	82Se	-0.14	1	93.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**86Sr**	201.50	1	93.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	N	88Sr	203.20	1	93.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	N	97Mo	0.11	1	92	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**98Mo**	0.09	1	92	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	N	107Ag	-0.06	1	92	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**109Ag**	-0.07	1	92	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	N	111Cd	0.01	1	92	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**114Cd**	0.01	1	92	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**118Sn**	0.04	1	96.7	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	N	120Sn	0.03	1	96.7	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	N	121Sb	0.03	1	96.7	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**123Sb**	0.05	1	96.7	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	N	135Ba	11.73	1	96.7	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**137Ba**	11.54	1	96.7	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	N	203Tl	0.00	1	101.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**205Tl**	0.00	1	101.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
J1402025-004	Y	**208Pb**	-0.24	1	101.4	3/27/2014	0:28	SAMP	J1402025-004	6020 D	
CCV-2	Y	**9Be**	25.89	1	95.1	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**27Al**	2535.00	1	95.1	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**47Ti**	249.20	1	95.1	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	48Ti	252.60	1	95.1	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**51V**	99.20	1	95.1	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**52Cr**	48.77	1	95.1	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**55Mn**	101.00	1	99.6	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**59Co**	49.20	1	99.6	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**60Ni**	101.00	1	99.6	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	N	62Ni	101.10	1	99.6	3/27/2014	0:33	CCV	CCV	N/A	ICS-A FH,
CCV-2	Y	63Cu	50.46	1	99.6	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**65Cu**	49.47	1	99.6	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**66Zn**	249.40	1	99.6	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	68Zn	258.30	1	99.6	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**75As**	51.17	1	99.6	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**78Se**	100.70	1	99.6	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	82Se	104.30	1	99.6	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**86Sr**	99.57	1	99.6	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	88Sr	101.80	1	99.6	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	97Mo	99.79	1	98.1	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**98Mo**	99.88	1	98.1	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	107Ag	24.09	1	98.1	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**109Ag**	24.44	1	98.1	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	111Cd	19.53	1	98.1	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**114Cd**	19.11	1	98.1	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**118Sn**	248.00	1	101.5	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	120Sn	239.10	1	101.5	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	121Sb	48.52	1	101.5	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**123Sb**	49.19	1	101.5	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	135Ba	98.50	1	101.5	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**137Ba**	97.58	1	101.5	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	203Tl	10.07	1	105.8	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**205Tl**	10.14	1	105.8	3/27/2014	0:33	CCV	CCV	N/A	
CCV-2	Y	**208Pb**	26.03	1	105.8	3/27/2014	0:33	CCV	CCV	N/A	
CCB-2	Y	**9Be**	0.01	1	94.2	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**27Al**	0.77	1	94.2	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**47Ti**	0.02	1	94.2	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	48Ti	0.06	1	94.2	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**51V**	0.69	1	94.2	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**52Cr**	-0.04	1	94.2	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**55Mn**	0.01	1	95.7	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**59Co**	0.00	1	95.7	3/27/2014	0:38	CCB	CCB	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
CCB-2	Y	**60Ni**	0.01	1	95.7	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	N	62Ni	0.09	1	95.7	3/27/2014	0:38	CCB	CCB	N/A	ICS-A FH,
CCB-2	Y	63Cu	-0.01	1	95.7	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**65Cu**	-0.03	1	95.7	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**66Zn**	0.03	1	95.7	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	68Zn	-0.01	1	95.7	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**75As**	-0.42	1	95.7	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**78Se**	0.06	1	95.7	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	82Se	-0.45	1	95.7	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**86Sr**	-0.03	1	95.7	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	88Sr	0.03	1	95.7	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	97Mo	0.28	1	96.2	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**98Mo**	0.27	1	96.2	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	107Ag	-0.07	1	96.2	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**109Ag**	-0.05	1	96.2	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	111Cd	0.00	1	96.2	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**114Cd**	0.02	1	96.2	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**118Sn**	0.87	1	99.5	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	120Sn	0.79	1	99.5	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	121Sb	0.12	1	99.5	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**123Sb**	0.15	1	99.5	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	135Ba	0.00	1	99.5	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**137Ba**	0.01	1	99.5	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	203Tl	0.01	1	100.9	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**205Tl**	0.01	1	100.9	3/27/2014	0:38	CCB	CCB	N/A	
CCB-2	Y	**208Pb**	-0.26	1	100.9	3/27/2014	0:38	CCB	CCB	N/A	
J1402025-005	Y	**9Be**	0.02	1	95.8	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**27Al**	15.09	1	95.8	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**47Ti**	0.54	1	95.8	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	N	48Ti	22.01	1	95.8	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**51V**	0.89	1	95.8	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**52Cr**	-0.04	1	95.8	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**55Mn**	27.07	1	95.7	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**59Co**	0.06	1	95.7	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**60Ni**	1.04	1	95.7	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	N	62Ni	0.36	1	95.7	3/27/2014	0:43	SAMP	J1402025-005	6020 D	ICS-A FH,
J1402025-005	N	63Cu	0.21	1	95.7	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**65Cu**	0.23	1	95.7	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**66Zn**	4.83	1	95.7	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	N	68Zn	5.67	1	95.7	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**75As**	-0.19	1	95.7	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**78Se**	-0.11	1	95.7	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	N	82Se	-0.49	1	95.7	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**86Sr**	51.05	1	95.7	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	N	88Sr	51.95	1	95.7	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	N	97Mo	1.68	1	93.8	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**98Mo**	1.88	1	93.8	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	N	107Ag	-0.05	1	93.8	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**109Ag**	-0.06	1	93.8	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	N	111Cd	0.01	1	93.8	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**114Cd**	0.00	1	93.8	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**118Sn**	0.25	1	97.9	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	N	120Sn	0.29	1	97.9	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	N	121Sb	0.11	1	97.9	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**123Sb**	0.11	1	97.9	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	N	135Ba	12.28	1	97.9	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**137Ba**	12.13	1	97.9	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	N	203Tl	0.01	1	103	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**205Tl**	0.01	1	103	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-005	Y	**208Pb**	-0.26	1	103	3/27/2014	0:43	SAMP	J1402025-005	6020 D	
J1402025-006	Y	**9Be**	0.01	1	97.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	**27Al**	413.00	1	97.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	**47Ti**	0.15	1	97.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	N	48Ti	9.43	1	97.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	**51V**	0.87	1	97.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	**52Cr**	-0.08	1	97.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	**55Mn**	0.26	1	98.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	**59Co**	0.03	1	98.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	**60Ni**	0.83	1	98.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	N	62Ni	0.45	1	98.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	ICS-A FH,
J1402025-006	N	63Cu	0.29	1	98.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	**65Cu**	0.23	1	98.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	**66Zn**	4.75	1	98.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	N	68Zn	7.91	1	98.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	**75As**	0.53	1	98.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	**78Se**	0.18	1	98.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	N	82Se	0.05	1	98.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	**86Sr**	327.30	1	98.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	N	88Sr	328.30	1	98.3	3/27/2014	0:49	SAMP	J1402025-006	6020 D	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402025-006	N	97Mo	8.17	1	98.9	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	98Mo	8.05	1	98.9	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	N	107Ag	-0.05	1	98.9	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	109Ag	-0.05	1	98.9	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	N	111Cd	0.01	1	98.9	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	114Cd	0.01	1	98.9	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	118Sn	0.24	1	103	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	N	120Sn	0.29	1	103	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	N	121Sb	0.21	1	103	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	123Sb	0.25	1	103	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	N	135Ba	55.04	1	103	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	137Ba	55.11	1	103	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	N	203Tl	0.02	1	104.6	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	205Tl	0.02	1	104.6	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402025-006	Y	208Pb	-0.25	1	104.6	3/27/2014	0:49	SAMP	J1402025-006	6020 D	
J1402026-001	Y	9Be	0.01	1	89.4	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	27Al	2.98	1	89.4	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	47Ti	0.49	1	89.4	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	N	48Ti	35.99	1	89.4	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	51V	1.14	1	89.4	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	52Cr	0.00	1	89.4	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	55Mn	259.90	1	87.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	59Co	1.06	1	87.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	60Ni	4.16	1	87.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	N	62Ni	3.75	1	87.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	ICS-A FH,
J1402026-001	N	63Cu	0.20	1	87.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	65Cu	0.20	1	87.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	66Zn	3.70	1	87.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	N	68Zn	10.43	1	87.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	75As	2.52	1	87.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	78Se	0.68	1	87.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	N	82Se	0.02	1	87.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	86Sr	182.80	1	87.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	N	88Sr	184.00	1	87.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	N	97Mo	0.29	1	89.5	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	98Mo	0.26	1	89.5	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	N	107Ag	-0.10	1	89.5	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	109Ag	-0.09	1	89.5	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	N	111Cd	0.00	1	89.5	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	114Cd	0.01	1	89.5	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	118Sn	-0.03	1	94.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	N	120Sn	0.05	1	94.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	N	121Sb	0.06	1	94.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	123Sb	0.08	1	94.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	N	135Ba	111.40	1	94.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	137Ba	110.80	1	94.2	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	N	203Tl	0.00	1	95.9	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	205Tl	0.00	1	95.9	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001	Y	208Pb	-0.25	1	95.9	3/27/2014	0:54	SAMP	J1402026-001	6020 D	
J1402026-001S	Y	9Be	25.24	1	90.7	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	27Al	2507.00	1	90.7	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	47Ti	258.20	1	90.7	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	N	48Ti	294.60	1	90.7	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	51V	100.90	1	90.7	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	52Cr	53.45	1	90.7	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	55Mn	378.10	1	88	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	59Co	54.11	1	88	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	60Ni	109.50	1	88	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	N	62Ni	109.40	1	88	3/27/2014	0:59	MS	JQ1402133-01	6020 D	ICS-A FH,
J1402026-001S	N	63Cu	53.60	1	88	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	65Cu	52.24	1	88	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	66Zn	257.00	1	88	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	N	68Zn	273.00	1	88	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	75As	57.52	1	88	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	78Se	106.70	1	88	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	N	82Se	109.50	1	88	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	86Sr	301.30	1	88	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	N	88Sr	304.60	1	88	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	N	97Mo	108.80	1	90.3	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	98Mo	107.70	1	90.3	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	N	107Ag	23.91	1	90.3	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	109Ag	24.13	1	90.3	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	N	111Cd	19.85	1	90.3	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	114Cd	19.54	1	90.3	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	118Sn	253.20	1	94	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	N	120Sn	248.80	1	94	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	N	121Sb	50.49	1	94	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	123Sb	50.10	1	94	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	N	135Ba	216.30	1	94	3/27/2014	0:59	MS	JQ1402133-01	6020 D	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402026-001S	Y	**137Ba**	218.00	1	94	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	N	203Tl	10.38	1	95.4	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	**205Tl**	10.47	1	95.4	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001S	Y	**208Pb**	25.91	1	95.4	3/27/2014	0:59	MS	JQ1402133-01	6020 D	
J1402026-001SD	Y	**9Be**	24.01	1	92.6	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**27Al**	2460.00	1	92.6	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**47Ti**	256.20	1	92.6	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	N	48Ti	292.40	1	92.6	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**51V**	99.10	1	92.6	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**52Cr**	52.16	1	92.6	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**55Mn**	365.20	1	88.4	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**59Co**	53.30	1	88.4	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**60Ni**	107.20	1	88.4	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	N	62Ni	104.80	1	88.4	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	ICS-A FH,
J1402026-001SD	N	63Cu	51.31	1	88.4	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**65Cu**	50.01	1	88.4	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**66Zn**	249.80	1	88.4	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	N	68Zn	265.30	1	88.4	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**75As**	57.06	1	88.4	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**78Se**	104.30	1	88.4	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	N	82Se	106.70	1	88.4	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**86Sr**	288.00	1	88.4	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	N	88Sr	289.60	1	88.4	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	N	97Mo	107.40	1	90.7	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**98Mo**	108.80	1	90.7	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	N	107Ag	23.21	1	90.7	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**109Ag**	23.76	1	90.7	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	N	111Cd	18.47	1	90.7	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**114Cd**	19.08	1	90.7	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**118Sn**	252.20	1	92.3	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	N	120Sn	247.40	1	92.3	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	N	121Sb	49.54	1	92.3	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**123Sb**	51.16	1	92.3	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	N	135Ba	211.70	1	92.3	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**137Ba**	213.30	1	92.3	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	N	203Tl	9.99	1	97.2	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**205Tl**	10.03	1	97.2	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001SD	Y	**208Pb**	24.71	1	97.2	3/27/2014	1:04	MSD	JQ1402133-02	6020 D	
J1402026-001L	Y	**9Be**	0.02	5	93.1	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**27Al**	2.89	5	93.1	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**47Ti**	0.23	5	93.1	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	N	48Ti	7.44	5	93.1	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**51V**	0.74	5	93.1	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**52Cr**	-0.24	5	93.1	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**55Mn**	54.05	5	92.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**59Co**	0.24	5	92.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**60Ni**	0.95	5	92.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	N	62Ni	0.83	5	92.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	ICS-A FH,
J1402026-001L	N	63Cu	0.14	5	92.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**65Cu**	0.11	5	92.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**66Zn**	2.74	5	92.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	N	68Zn	4.13	5	92.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**75As**	0.56	5	92.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**78Se**	0.16	5	92.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	N	82Se	-0.11	5	92.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**86Sr**	36.94	5	92.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	N	88Sr	37.36	5	92.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	N	97Mo	0.45	5	91.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**98Mo**	0.40	5	91.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	N	107Ag	-0.05	5	91.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**109Ag**	-0.04	5	91.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	N	111Cd	0.01	5	91.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**114Cd**	0.02	5	91.7	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**118Sn**	0.84	5	95.1	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	N	120Sn	0.82	5	95.1	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	N	121Sb	0.06	5	95.1	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**123Sb**	0.08	5	95.1	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	N	135Ba	23.41	5	95.1	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**137Ba**	23.05	5	95.1	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	N	203Tl	0.04	5	98.3	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**205Tl**	0.04	5	98.3	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001L	Y	**208Pb**	-0.23	5	98.3	3/27/2014	1:09	SD	Serial Dilution	6020 D	
J1402026-001A	Y	**9Be**	23.69	1	93.1	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**27Al**	2426.00	1	93.1	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**47Ti**	249.60	1	93.1	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	N	48Ti	284.10	1	93.1	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**51V**	96.52	1	93.1	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	52Cr	51.07	1	93.1	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	55Mn	358.50	1	90.3	3/27/2014	1:14	PS	Post Spike	6020 D	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402026-001A	Y	**59Co**	51.72	1	90.3	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**60Ni**	104.40	1	90.3	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	N	62Ni	104.70	1	90.3	3/27/2014	1:14	PS	Post Spike	6020 D	ICS-A FH,
J1402026-001A	N	63Cu	49.44	1	90.3	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**65Cu**	48.54	1	90.3	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**66Zn**	247.40	1	90.3	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	N	68Zn	261.70	1	90.3	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**75As**	54.99	1	90.3	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**78Se**	101.50	1	90.3	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	N	82Se	104.30	1	90.3	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**86Sr**	288.20	1	90.3	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	N	88Sr	289.20	1	90.3	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	N	97Mo	107.50	1	89.5	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**98Mo**	105.80	1	89.5	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	N	107Ag	22.75	1	89.5	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**109Ag**	23.20	1	89.5	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	N	111Cd	18.58	1	89.5	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**114Cd**	18.85	1	89.5	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**118Sn**	241.30	1	94.7	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	N	120Sn	239.10	1	94.7	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	N	121Sb	48.07	1	94.7	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**123Sb**	49.14	1	94.7	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	N	135Ba	207.70	1	94.7	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**137Ba**	209.30	1	94.7	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	N	203Tl	9.77	1	98.5	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**205Tl**	9.86	1	98.5	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-001A	Y	**208Pb**	24.30	1	98.5	3/27/2014	1:14	PS	Post Spike	6020 D	
J1402026-002	Y	**9Be**	0.02	1	86.8	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**27Al**	74.31	1	86.8	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**47Ti**	1.22	1	86.8	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	N	48Ti	24.82	1	86.8	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**51V**	13.80	1	86.8	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**52Cr**	2.50	1	86.8	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**55Mn**	163.20	1	77.2	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**59Co**	1.60	1	77.2	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**60Ni**	6.62	1	77.2	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	N	62Ni	8.43	1	77.2	3/27/2014	1:19	SAMP	J1402026-002	6020 D	ICS-A FH,
J1402026-002	N	63Cu	1.70	1	77.2	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**65Cu**	0.20	1	77.2	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**66Zn**	4.56	1	77.2	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	N	68Zn	9.09	1	77.2	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**75As**	6.74	1	77.2	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**78Se**	1.30	1	77.2	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	N	82Se	1.33	1	77.2	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**86Sr**	132.20	1	77.2	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	N	88Sr	133.50	1	77.2	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	N	97Mo	2.71	1	77.8	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**98Mo**	2.78	1	77.8	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	N	107Ag	-0.08	1	77.8	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**109Ag**	-0.08	1	77.8	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	N	111Cd	0.07	1	77.8	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**114Cd**	-0.04	1	77.8	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**118Sn**	3.45	1	86.4	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	N	120Sn	3.36	1	86.4	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	N	121Sb	0.61	1	86.4	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**123Sb**	0.65	1	86.4	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	N	135Ba	75.15	1	86.4	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**137Ba**	76.45	1	86.4	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	N	203Tl	0.03	1	89	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**205Tl**	0.02	1	89	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-002	Y	**208Pb**	0.18	1	89	3/27/2014	1:19	SAMP	J1402026-002	6020 D	
J1402026-003	Y	**9Be**	0.02	1	87.6	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	**27Al**	76.59	1	87.6	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	**47Ti**	0.92	1	87.6	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	N	48Ti	24.66	1	87.6	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	**51V**	13.53	1	87.6	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	**52Cr**	2.62	1	87.6	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	**55Mn**	168.90	1	77	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	**59Co**	1.67	1	77	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	**60Ni**	6.92	1	77	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	N	62Ni	7.89	1	77	3/27/2014	1:24	SAMP	J1402026-003	6020 D	ICS-A FH,
J1402026-003	N	63Cu	1.78	1	77	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	**65Cu**	0.26	1	77	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	**66Zn**	3.95	1	77	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	N	68Zn	8.90	1	77	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	**75As**	7.08	1	77	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	**78Se**	1.32	1	77	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	N	82Se	1.68	1	77	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	**86Sr**	135.60	1	77	3/27/2014	1:24	SAMP	J1402026-003	6020 D	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402026-003	N	88Sr	137.90	1	77	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	N	97Mo	2.74	1	79.5	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	98Mo	2.67	1	79.5	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	N	107Ag	-0.08	1	79.5	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	109Ag	-0.09	1	79.5	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	N	111Cd	0.06	1	79.5	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	114Cd	-0.04	1	79.5	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	118Sn	0.25	1	86.7	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	N	120Sn	0.31	1	86.7	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	N	121Sb	0.55	1	86.7	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	123Sb	0.64	1	86.7	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	N	135Ba	77.12	1	86.7	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	137Ba	78.46	1	86.7	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	N	203Tl	0.01	1	89.9	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	205Tl	0.01	1	89.9	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-003	Y	208Pb	0.22	1	89.9	3/27/2014	1:24	SAMP	J1402026-003	6020 D	
J1402026-004	Y	9Be	0.09	1	89.1	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	27Al	12.79	1	89.1	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	47Ti	0.95	1	89.1	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	N	48Ti	61.58	1	89.1	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	51V	1.65	1	89.1	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	52Cr	0.62	1	89.1	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	55Mn	355.10	1	82	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	59Co	5.50	1	82	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	60Ni	10.86	1	82	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	N	62Ni	9.49	1	82	3/27/2014	1:29	SAMP	J1402026-004	6020 D	ICS-A FH,
J1402026-004	N	63Cu	1.80	1	82	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	65Cu	1.55	1	82	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	66Zn	47.85	1	82	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	N	68Zn	58.24	1	82	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	75As	12.29	1	82	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	78Se	0.78	1	82	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	N	82Se	0.47	1	82	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	86Sr	328.40	1	82	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	N	88Sr	331.50	1	82	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	N	97Mo	1.30	1	84.6	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	98Mo	1.38	1	84.6	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	N	107Ag	-0.02	1	84.6	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	109Ag	-0.01	1	84.6	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	N	111Cd	0.10	1	84.6	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	114Cd	0.07	1	84.6	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	118Sn	0.27	1	90.9	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	N	120Sn	0.24	1	90.9	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	N	121Sb	0.53	1	90.9	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	123Sb	0.50	1	90.9	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	N	135Ba	165.50	1	90.9	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	137Ba	164.30	1	90.9	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	N	203Tl	0.24	1	90.6	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	205Tl	0.23	1	90.6	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
J1402026-004	Y	208Pb	-0.10	1	90.6	3/27/2014	1:29	SAMP	J1402026-004	6020 D	
CCV-3	Y	9Be	24.27	1	99.4	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	27Al	2482.00	1	99.4	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	47Ti	245.10	1	99.4	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	48Ti	252.40	1	99.4	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	51V	99.22	1	99.4	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	52Cr	49.70	1	99.4	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	55Mn	101.40	1	99.7	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	59Co	50.25	1	99.7	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	60Ni	102.10	1	99.7	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	N	62Ni	103.20	1	99.7	3/27/2014	1:34	CCV	CCV	N/A	ICS-A FH,
CCV-3	Y	63Cu	51.72	1	99.7	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	65Cu	50.30	1	99.7	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	66Zn	252.20	1	99.7	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	68Zn	259.50	1	99.7	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	75As	52.28	1	99.7	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	78Se	103.40	1	99.7	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	82Se	106.40	1	99.7	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	86Sr	102.80	1	99.7	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	88Sr	104.20	1	99.7	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	97Mo	102.20	1	101.3	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	98Mo	100.40	1	101.3	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	107Ag	24.58	1	101.3	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	109Ag	24.50	1	101.3	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	111Cd	19.02	1	101.3	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	114Cd	19.30	1	101.3	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	118Sn	252.10	1	102.4	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	120Sn	241.40	1	102.4	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	121Sb	48.22	1	102.4	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	123Sb	48.70	1	102.4	3/27/2014	1:34	CCV	CCV	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
CCV-3	Y	135Ba	99.14	1	102.4	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	137Ba	97.48	1	102.4	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	203Tl	10.69	1	102.7	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	205Tl	10.34	1	102.7	3/27/2014	1:34	CCV	CCV	N/A	
CCV-3	Y	208Pb	26.07	1	102.7	3/27/2014	1:34	CCV	CCV	N/A	
CCB-3	Y	9Be	0.01	1	98.1	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	27Al	0.73	1	98.1	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	47Ti	-0.01	1	98.1	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	48Ti	0.06	1	98.1	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	51V	-0.04	1	98.1	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	52Cr	-0.12	1	98.1	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	55Mn	0.02	1	98.4	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	59Co	0.01	1	98.4	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	60Ni	0.01	1	98.4	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	N	62Ni	0.28	1	98.4	3/27/2014	1:39	CCB	CCB	N/A	ICS-A FH,
CCB-3	Y	63Cu	0.00	1	98.4	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	65Cu	-0.02	1	98.4	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	66Zn	0.04	1	98.4	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	68Zn	0.01	1	98.4	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	75As	-0.21	1	98.4	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	78Se	0.04	1	98.4	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	82Se	-0.19	1	98.4	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	86Sr	0.06	1	98.4	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	88Sr	0.03	1	98.4	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	97Mo	0.30	1	100.1	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	98Mo	0.30	1	100.1	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	107Ag	-0.06	1	100.1	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	109Ag	-0.07	1	100.1	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	111Cd	0.00	1	100.1	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	114Cd	0.01	1	100.1	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	118Sn	0.81	1	99.5	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	120Sn	0.76	1	99.5	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	121Sb	0.16	1	99.5	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	123Sb	0.19	1	99.5	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	135Ba	0.00	1	99.5	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	137Ba	0.00	1	99.5	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	203Tl	0.01	1	99.7	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	205Tl	0.01	1	99.7	3/27/2014	1:39	CCB	CCB	N/A	
CCB-3	Y	208Pb	-0.25	1	99.7	3/27/2014	1:39	CCB	CCB	N/A	
J1402026-005	Y	9Be	0.08	1	90.3	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	27Al	5.77	1	90.3	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	47Ti	2.37	1	90.3	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	N	48Ti	169.00	1	90.3	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	51V	0.72	1	90.3	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	52Cr	1.17	1	90.3	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	55Mn	449.50	1	76.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	59Co	12.45	1	76.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	60Ni	35.90	1	76.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	N	62Ni	32.04	1	76.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	ICS-A FH,
J1402026-005	N	63Cu	4.22	1	76.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	65Cu	4.04	1	76.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	66Zn	9.55	1	76.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	N	68Zn	34.72	1	76.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	75As	9.36	1	76.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	78Se	0.56	1	76.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	N	82Se	0.30	1	76.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	86Sr	1159.00	1	76.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	N	88Sr	1133.00	1	76.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	N	97Mo	2.20	1	78.8	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	98Mo	2.11	1	78.8	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	N	107Ag	-0.02	1	78.8	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	109Ag	-0.03	1	78.8	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	N	111Cd	0.09	1	78.8	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	114Cd	0.07	1	78.8	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	118Sn	0.37	1	84.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	N	120Sn	0.43	1	84.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	N	121Sb	1.06	1	84.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	123Sb	1.18	1	84.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	N	135Ba	456.00	1	84.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	137Ba	456.90	1	84.6	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	N	203Tl	0.27	1	87.3	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	205Tl	0.25	1	87.3	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-005	Y	208Pb	0.09	1	87.3	3/27/2014	1:44	SAMP	J1402026-005	6020 D	
J1402026-006	Y	9Be	0.01	1	85.7	3/27/2014	1:49	SAMP	J1402026-006	6020 D	
J1402026-006	Y	27Al	4.11	1	85.7	3/27/2014	1:49	SAMP	J1402026-006	6020 D	
J1402026-006	Y	47Ti	1.72	1	85.7	3/27/2014	1:49	SAMP	J1402026-006	6020 D	
J1402026-006	N	48Ti	62.32	1	85.7	3/27/2014	1:49	SAMP	J1402026-006	6020 D	
J1402026-006	Y	51V	1.03	1	85.7	3/27/2014	1:49	SAMP	J1402026-006	6020 D	
J1402026-006	Y	52Cr	0.85	1	85.7	3/27/2014	1:49	SAMP	J1402026-006	6020 D	

Columbia Analytical Services

Analytical Run Coversheet

Analyst: Solo   Data File ID: 032814A   LIMS Run #: 385672

Analysis: ICP-MS   Method References: 200.8 / 6020   Inst ID: J-ICP-MS-01

Standard's Trace Numbers

STD ID	Trace #	Exp Date	STD ID	Trace #	Exp Date
ICAL-1	MET-17-81C	4-1-14	INT STD	MET-17-83F	4-26-14
ICAL-2	81D		ICSA	84A	4-2-14
ICAL-3	81E		ICSAB	84B	4-1-14
ICAL-4	81F		Blank / Diluent	83E	5-26-15
ICV	81G				

Standard Concentrations and Ranges

Element	MRL	Linear Range	ICV	CCV	LCS	ICSA	ICSAB	Units	ICV RSD
9Be	0.5	3000	20	25	25	0	10	ug/L	3.144
27Al	50	50000	500	2500	2500	50000	51000	ug/L	0.911
47Ti	5	5000	250	250	250	1000	1100	ug/L	0.57
48Ti	5	5000	250	250	250	1000	1100	ug/L	0.238
51V	2	10000	100	100	100	0	40	ug/L	1.236
52Cr	1	5000	50	50	50	0	20	ug/L	0.581
55Mn	2	5000	50	100	100	0	40	ug/L	0.416
59Co	1	5000	50	50	50	0	20	ug/L	0.665
60Ni	2	5000	50	100	100	0	40	ug/L	0.893
62Ni	2	5000	50	100	100	0	40	ug/L	2.789
63Cu	1	5000	50	50	50	0	20	ug/L	0.994
65Cu	1	5000	50	50	50	0	20	ug/L	1.481
66Zn	5	10000	100	250	250	0	100	ug/L	0.652
68Zn	5	10000	100	250	250	0	100	ug/L	1.232
75As	1	5000	50	50	50	0	20	ug/L	2.08
78Se	2	5000	50	100	100	0	40	ug/L	1.033
82Se	2	5000	50	100	100	0	40	ug/L	1.128
86Sr	2	5000	50	100	100	0	40	ug/L	0.976
88Sr	2	5000	50	100	100	0	40	ug/L	0.34
97Mo	2	5000	50	100	100	1000	1040	ug/L	0.771
98Mo	2	5000	50	100	100	1000	1040	ug/L	1.251
107Ag	0.5	100	50	25	25	0	10	ug/L	1.608
109Ag	0.5	100	50	25	25	0	10	ug/L	0.534
111Cd	0.4	2500	25	20	20	0	8	ug/L	1.492
114Cd	0.4	2500	25	20	20	0	8	ug/L	1.261
118Sn	5	20000	200	250	250	0	100	ug/L	1.131
120Sn	5	20000	200	250	250	0	100	ug/L	1.242
121Sb	1	5000	50	50	50	0	20	ug/L	1.052
123Sb	1	5000	50	50	50	0	20	ug/L	1.889
135Ba	2	5000	50	100	100	0	40	ug/L	2.404
137Ba	2	5000	50	100	100	0	40	ug/L	1.053
203Tl	0.2	5000	50	10	10	0	4	ug/L	1.355
205Tl	0.2	5000	50	10	10	0	4	ug/L	0.838
208Pb	0.5	5000	50	25	25	0	10	ug/L	0.934

Stability Report < 5% ✓

Cal Curves > 0.995 ✓

Mass Call Rpt Incl. ✓

Comments

2025-007 is T4

Isotopes in **BOLD** are the default isotopes used for reporting.

Reviewed By / Date: VP 4/2/14

ICP-MS Run Sequence **Date File ID: 032814A**

#	Samp / Std ID	Date	Time	#	Samp / Std ID	Date	Time	#	Samp / Std ID	Date	Time
1	Cal Blank	3/28/14	13:12								
2	Cal 1	3/28/14	13:17								
3	Cal 2	3/28/14	13:22								
4	Cal 3	3/28/14	13:27								
5	Cal 4	3/28/14	13:32								
6	ICV	3/28/14	13:37								
7	ICB	3/28/14	13:42								
8	MRL	3/28/14	13:47								
9	ICSA	3/28/14	13:52								
10	ICSAB	3/28/14	13:57								
11	CCV-1	3/28/14	14:02								
12	CCB-1	3/28/14	14:08								
13	MB-02258-02	3/28/14	14:13								
14	LCS-02258-01	3/28/14	14:18								
15	J1402025-007	3/28/14	14:23								
16	J1402025-007S	3/28/14	14:28								
17	J1402025-007SD	3/28/14	14:33								
18	J1402025-007L	3/28/14	14:38								
19	J1402025-007A	3/28/14	14:43								
20	J1402076-001	3/28/14	14:48								
21	J1402076-002	3/28/14	14:53								
22	MB-02293-02 10x	3/28/14	14:58								
23	CCV-2	3/28/14	15:03								
24	CCB-2	3/28/14	15:08								
25	LCS-02293-01 10x	3/28/14	15:13								
26	J1402083-001 10x	3/28/14	15:18								
27	J1402083-001L 10x	3/28/14	15:23								
28	J1402083-001A 10x	3/28/14	15:28								
29	J1402197-001 10x	3/28/14	15:33								
30	CCV-3	3/28/14	15:38								
31	CCB-3	3/28/14	15:43								
32	Acid Rinse	3/28/14	15:48								
33	DI Rinse	3/28/14	15:53								

ICP-MS DATA REPORTED WITH FAILING CRITERIA

Data File ID: 032814A

Sample ID	Analyte	Failure(s)	Analyst's Comments

ICP-MS Isotope Discrepancy Summary Sheet

Sample ID	Isotope-1	Isotope-1 Conc (ug/L)	Isotope-2	Isotope-2 Conc (ug/L)	RPD	ANAL DATE / TIME
J1402025-007	**47Ti**	0.747	48Ti	31.77	190.8	3/28/2014 14:23
J1402076-001	**47Ti**	0.827	48Ti	29.39	189.1	3/28/2014 14:48
J1402076-002	**47Ti**	0.563	48Ti	41.27	194.6	3/28/2014 14:53

 VB

Isotopes Reported Other Than Defaults When Defaults Pass QC Checks

Data File ID: 032814A

Sample ID	Reported Isotope	Reported Conc	Default Isotope	Default Conc	Analyst's Comments

VR

Excluded In Calib	Excluded In Results	Peak Run Excluded	Multi Element	Semi Quant	Internal Standard	Standard Addition

Uncorrected ICPS Per Mass

S-Calibration Has Edited Standard   E-Calibration Edited   I-Invalid Calibration   V-Valley Integration Failed
F-Interference Correction Failed   T-Tripped   P-Pulse Counting   M-Result Over Max

Run	Label	TimeStamp	5Bkg	7Li	9Be	24Mg	25Mg	26Mg
1	Stability_0328_1	3/28/2014 12:33:05 F	(P)0.000	(P)60567.777	(P)31024.784	(P)92965.065	(P)13400.732	(P)16893.321
2	Stability_0328_1	3/28/2014 12:33:33 F	(P)0.000	(P)60085.102	(P)30260.912	(P)93401.113	(P)13526.405	(P)16856.610
3	Stability_0328_1	3/28/2014 12:34:02 F	(P)0.000	(P)52951.635	(P)31886.660	(P)94759.989	(P)13677.656	(P)17553.007
4	Stability_0328_1	3/28/2014 12:34:30 F	(P)0.000	(P)52023.096	(P)32385.564	(P)94766.764	(P)13725.484	(P)17035.715
5	Stability_0328_1	3/28/2014 12:34:59 F	(P)0.000	(P)62957.030	(P)29845.598	(P)93265.848	(P)13428.536	(P)16694.196
	Mean of Stability_032	3/28/2014 12:33:05 F	(P)0.000	(P)57716.928	(P)31080.704	(P)93831.756	(P)13551.763	(P)17006.570
	SD of Stability_0328_1		(P)0.000	(P)4907.189	(P)1066.876	(P)864.973	(P)145.488	(P)328.760
	%RSD of Stability_		(P)0.000	(P)8.502	(P)3.433	(P)0.922	(P)1.074	(P)1.933

Run	Label	TimeStamp	59Co	138Ba++	113In	115In	138Ba	140Ce
1	Stability_0328_1	3/28/2014 12:33:05 F	(P)287706.360	(P)17087.992	(P)17982.422	(P)405479.600	(P)275030.920	(P)409683.230
2	Stability_0328_1	3/28/2014 12:33:33 F	(P)289817.030	(P)17113.579	(P)17921.239	(P)410882.140	(P)276636.540	(P)415457.700
3	Stability_0328_1	3/28/2014 12:34:02 F	(P)287981.530	(P)17242.623	(P)17929.022	(P)411505.630	(P)278579.760	(P)412160.120
4	Stability_0328_1	3/28/2014 12:34:30 F	(P)289041.810	(P)16936.702	(P)18196.026	(P)409911.480	(P)275275.130	(P)412946.650
5	Stability_0328_1	3/28/2014 12:34:59 F	(P)289931.640	(P)16946.717	(P)17866.722	(P)406616.780	(P)274630.510	(P)413520.550
	Mean of Stability_032	3/28/2014 12:33:05 F	(P)288895.670	(P)17065.523	(P)17979.086	(P)408879.130	(P)276030.570	(P)412753.650
	SD of Stability_0328_1		(P)1023.914	(P)127.366	(P)128.016	(P)2676.348	(P)1612.122	(P)2104.582
	%RSD of Stability_		(P)0.354	(P)0.746	(P)0.712	(P)0.655	(P)0.584	(P)0.510

Run	Label	TimeStamp	154BaO	156CeO	175	206Pb	207Pb	208Pb
1	Stability_0328_1	3/28/2014 12:33:05 F	(P)203.335	(P)6901.668	(P)31.111	(P)125199.600	(P)105292.170	(P)258879.280
2	Stability_0328_1	3/28/2014 12:33:33 F	(P)201.113	(P)7072.865	(P)43.333	(P)125267.950	(P)106182.060	(P)262199.950
3	Stability_0328_1	3/28/2014 12:34:02 F	(P)194.446	(P)7021.726	(P)48.889	(P)123864.740	(P)105610.090	(P)260541.210
4	Stability_0328_1	3/28/2014 12:34:30 F	(P)158.890	(P)6975.037	(P)28.889	(P)125626.660	(P)106723.840	(P)259291.260
5	Stability_0328_1	3/28/2014 12:34:59 F	(P)204.446	(P)7066.198	(P)28.889	(P)124523.800	(P)105615.660	(P)258851.980
	Mean of Stability_032	3/28/2014 12:33:05 F	(P)192.446	(P)7007.499	(P)36.222	(P)124896.550	(P)105884.760	(P)259952.740
	SD of Stability_0328_1		(P)19.155	(P)71.019	(P)9.283	(P)701.144	(P)568.214	(P)1431.588
	%RSD of Stability_		(P)9.954	(P)1.013	(P)25.628	(P)0.561	(P)0.537	(P)0.551

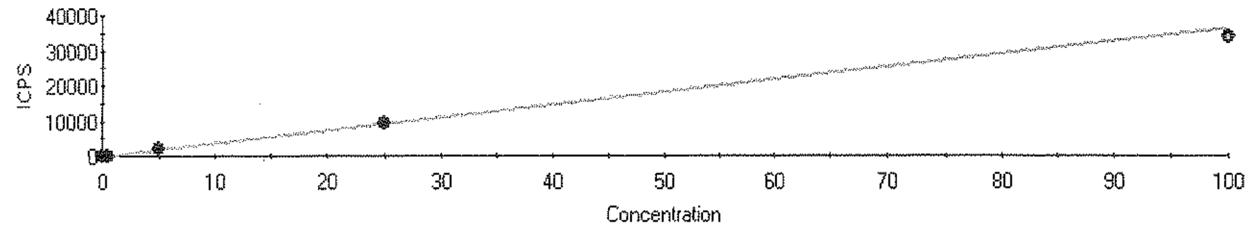
Run	Label	TimeStamp	209Bi	220Bkg	238U
1	Stability_0328_1	3/28/2014 12:33:05 F	(P)400204.260	(P)0.000	(P)528227.730
2	Stability_0328_1	3/28/2014 12:33:33 F	(P)399885.200	(P)0.000	531663.880
3	Stability_0328_1	3/28/2014 12:34:02 F	(P)402834.040	(P)0.000	529202.340
4	Stability_0328_1	3/28/2014 12:34:30 F	(P)402433.210	(P)0.000	528925.560
5	Stability_0328_1	3/28/2014 12:34:59 F	(P)402324.850	(P)0.000	527228.590
	Mean of Stability_032	3/28/2014 12:33:05 F	(P)401536.310	(P)0.000	529049.620
	SD of Stability_0328_1		(P)1379.389	(P)0.000	1648.084
	%RSD of Stability_		(P)0.344	(P)0.000	0.312

ICP-MS MASS CALIBRATION SUMMARY SHEET

Data File ID: 032814A

Element	Mass	Mass DAC	Peak Width (AMU)	Error (AMU)	Include	Resolution PASS / FAIL (< 0.9 AMU)	Accuracy PASS / FAIL (+/- 0.1 AMU)
Be	9.012	2007	0.715	0.006	TRUE	PASS	PASS
Mg	23.985	5828	0.715	0.047	TRUE	PASS	PASS
Mg	24.986	6081	0.664	0.041	TRUE	PASS	PASS
Mg	25.983	6335	0.715	0.042	TRUE	PASS	PASS
Al	26.982	6582	0.715	0.013	TRUE	PASS	PASS
Ti	46.952	11660	0.715	-0.009	TRUE	PASS	PASS
V	50.944	12680	0.766	0.005	TRUE	PASS	PASS
Cr	51.94	12934	0.715	0.006	TRUE	PASS	PASS
Mn	54.938	13694	0.766	-0.006	TRUE	PASS	PASS
Co	58.933	14708	0.766	-0.019	TRUE	PASS	PASS
Ni	59.931	14962	0.715	-0.02	TRUE	PASS	PASS
Cu	64.928	16229	0.766	-0.041	TRUE	PASS	PASS
Zn	65.926	16489	0.766	-0.019	TRUE	PASS	PASS
As	74.922	18777	0.766	-0.03	TRUE	PASS	PASS
Se	77.919	19538	0.715	-0.04	TRUE	PASS	PASS
Sr	85.91	21583	0.714	-0.003	TRUE	PASS	PASS
Mo	97.905	24638	0.714	-0.007	TRUE	PASS	PASS
Ag	108.905	27446	0.714	0.014	TRUE	PASS	PASS
Cd	113.903	28720	0.714	0.015	TRUE	PASS	PASS
Sn	117.902	29740	0.663	0.019	TRUE	PASS	PASS
Sb	122.904	31014	0.663	0.015	TRUE	PASS	PASS
Ba	136.906	34589	0.663	0.038	TRUE	PASS	PASS
Tl	204.972	51931	0.662	-0.036	TRUE	PASS	PASS
Pb	205.974	52191	0.662	-0.019	TRUE	PASS	PASS
Pb	206.976	52451	0.662	-0.002	TRUE	PASS	PASS
Pb	207.977	52711	0.662	0.016	TRUE	PASS	PASS

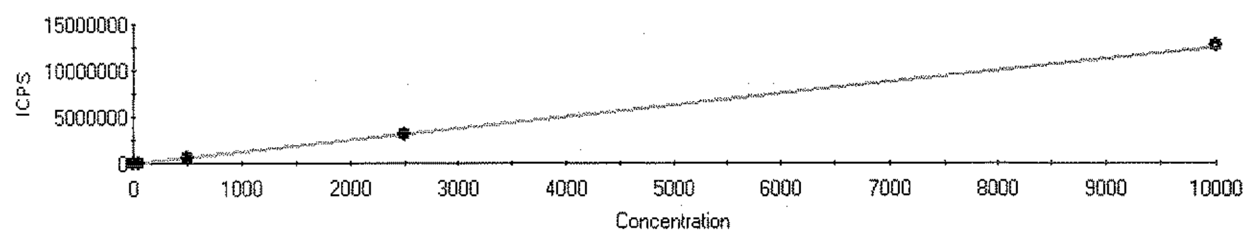
Fully Quant Calibration 9Be FQ Block 1



Intercept CPS=13.873994 Intercept Conc=0.038056
Sensitivity=364.572405 Correlation Coeff=0.998810

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.04	0.04	29.52	
Cal 1	0.50	0.46	-0.04	183.05	-0.04
Cal 2	5.00	5.13	0.13	1,882.40	0.13
Cal 3	25.00	25.12	0.12	9,171.08	0.12
Cal 4	100.00	92.66	-7.34	33,796.53	-7.34

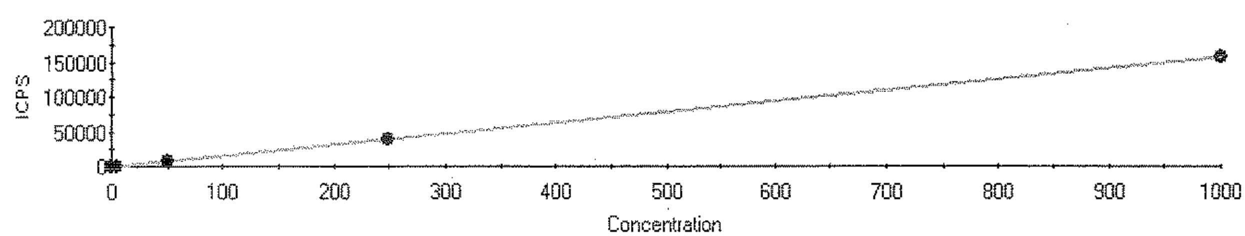
Fully Quant Calibration 27Al FQ Block 1



Intercept CPS=824.858584 Intercept Conc=0.655041
Sensitivity=1259.247954 Correlation Coeff=0.999806

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	825.80	
Cal 1	50.00	48.20	-1.80	61,523.63	-1.80
Cal 2	500.00	504.67	4.67	636,325.94	4.67
Cal 3	2,500.00	2,489.16	-10.84	3,135,293.48	-10.84
Cal 4	10,000.00	10,027.98	27.98	12,628,532.70	27.98

Fully Quant Calibration 47Ti FQ Block 1



Intercept CPS=22.271766 Intercept Conc=0.142555
Sensitivity=156.233007 Correlation Coeff=0.999920

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	22.22	
Cal 1	5.00	5.06	0.06	812.07	0.06
Cal 2	50.00	51.07	1.07	8,000.81	1.07
Cal 3	250.00	249.20	-0.80	38,956.27	-0.80

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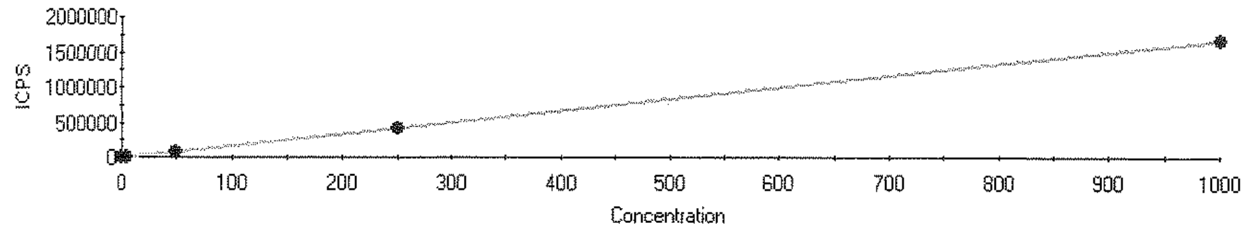
Cal 4	1,000.00	1,000.75	0.75	156,373.07	0.75

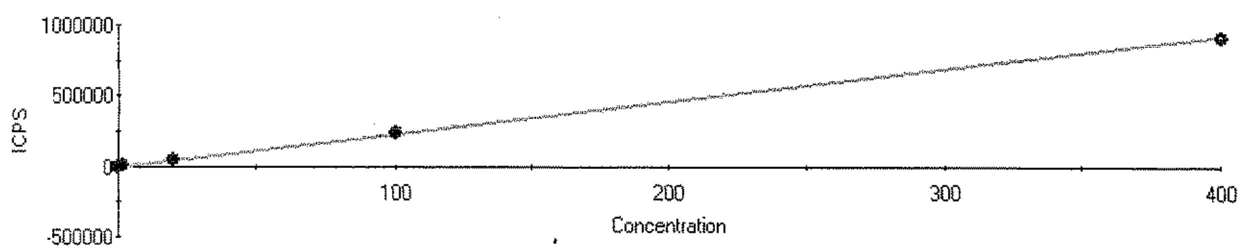
Fully Quant Calibration 48Ti FQ Block 1



Intercept CPS=140.542924 Intercept Conc=0.084829
Sensitivity=1656.785977 Correlation Coeff=0.999955

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.01	0.01	156.92	
Cal 1	5.00	4.93	-0.07	8,313.03	-0.07
Cal 2	50.00	50.21	0.21	83,329.31	0.21
Cal 3	250.00	251.59	1.59	416,974.64	1.59
Cal 4	1,000.00	1,000.40	0.40	1,657,587.35	0.40

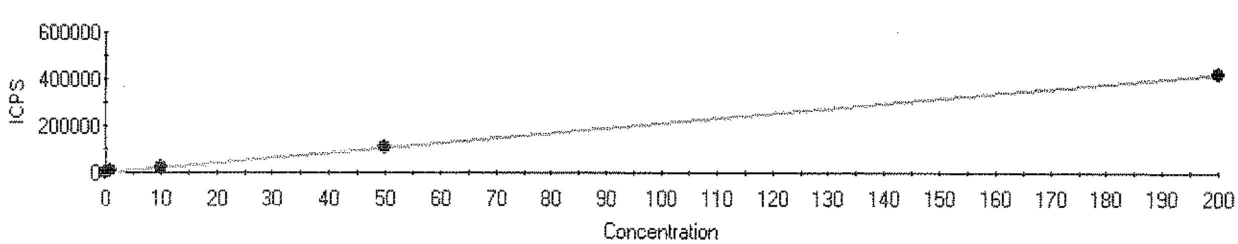
Fully Quant Calibration 51V FQ Block 1



Intercept CPS=-974.898976 Intercept Conc=-0.422608
Sensitivity=2306.865414 Correlation Coeff=0.999506

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.45	0.45	62.55	
Cal 1	2.00	2.00	0.00	3,647.22	0.00
Cal 2	20.00	19.72	-0.28	44,517.78	-0.28
Cal 3	100.00	101.85	1.85	233,987.11	1.85
Cal 4	400.00	396.70	-3.30	914,170.05	-3.30

Fully Quant Calibration 52Cr FQ Block 1

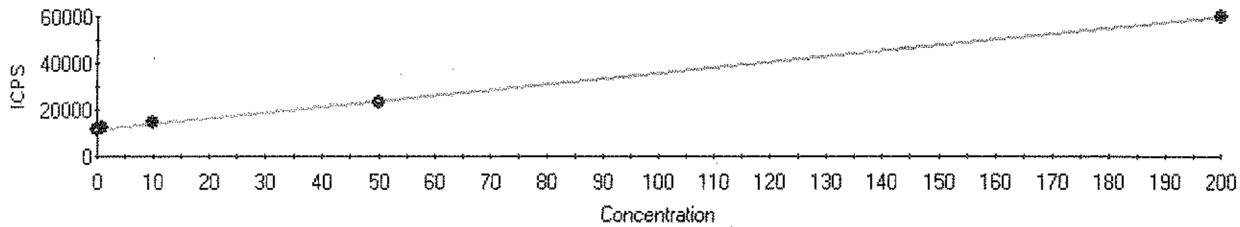


Intercept CPS=3352.932661 Intercept Conc=1.590670
Sensitivity=2107.874311 Correlation Coeff=0.998882

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.04	0.04	3,444.01	
Cal 1	1.00	0.97	-0.03	5,389.51	-0.03
Cal 2	10.00	9.95	-0.05	24,320.02	-0.05

Cal 3	50.00	50.72	0.72	110,262.21	0.72
Cal 4	200.00	199.66	-0.34	424,207.06	-0.34

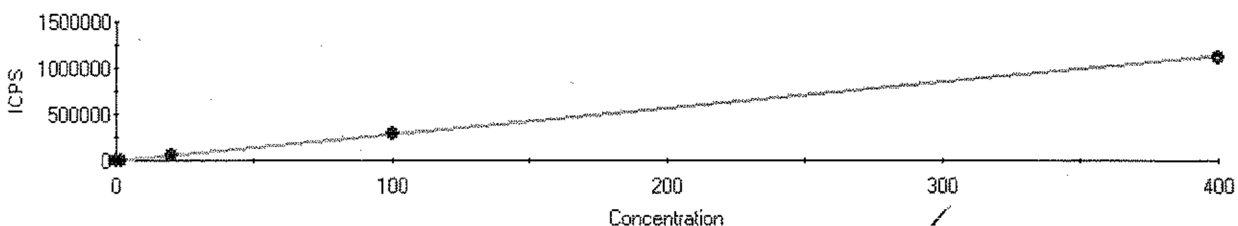
Fully Quant Calibration 53Cr FQ Block 1



Intercept CPS=11779.647107 Intercept Conc=49.221422
Sensitivity=239.319519 Correlation Coeff=0.999642

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-1.66	-1.66	11,382.25	
Cal 1	1.00	2.37	1.37	12,347.62	1.37
Cal 2	10.00	11.65	1.65	14,568.31	1.65
Cal 3	50.00	48.30	-1.70	23,338.55	-1.70
Cal 4	200.00	200.34	0.34	59,723.90	0.34

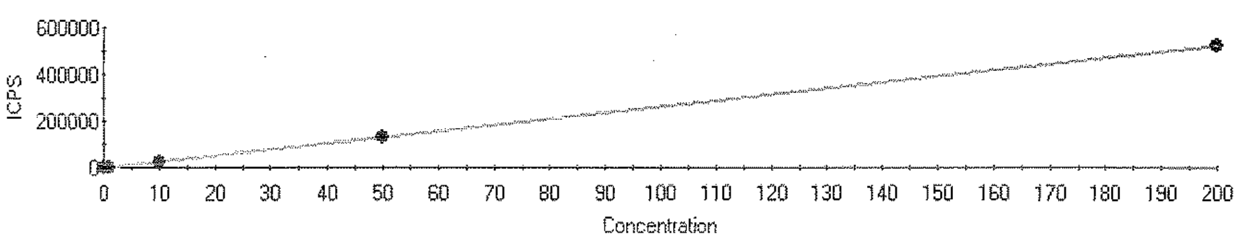
Fully Quant Calibration 55Mn FQ Block 1



Intercept CPS=133.985160 Intercept Conc=0.047611
Sensitivity=2814.150798 Correlation Coeff=0.999962

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	133.32	
Cal 1	2.00	2.01	0.01	5,778.70	0.01
Cal 2	20.00	20.01	0.01	56,443.31	0.01
Cal 3	100.00	100.84	0.84	283,913.46	0.84
Cal 4	400.00	395.10	-4.90	1,112,018.57	-4.90

Fully Quant Calibration 59Co FQ Block 1

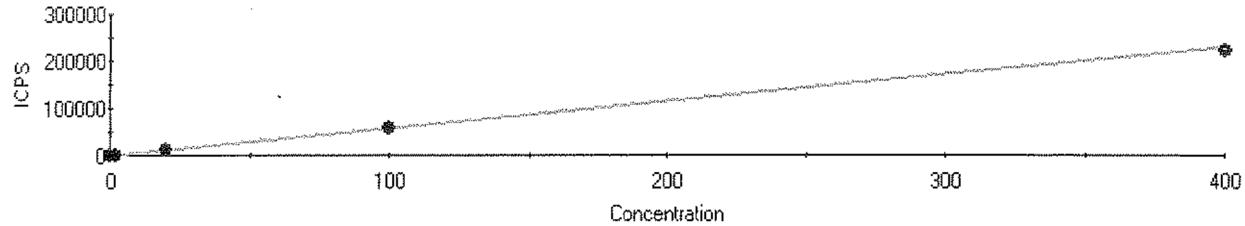


Intercept CPS=11.111552 Intercept Conc=0.004271
Sensitivity=2601.635384 Correlation Coeff=0.999920

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	11.11	
Cal 1	1.00	1.00	0.00	2,623.18	0.00

Cal 2	10.00	9.95	-0.05	25,904.86	-0.05
Cal 3	50.00	50.68	0.68	131,854.04	0.68
Cal 4	200.00	199.88	-0.12	520,021.65	-0.12

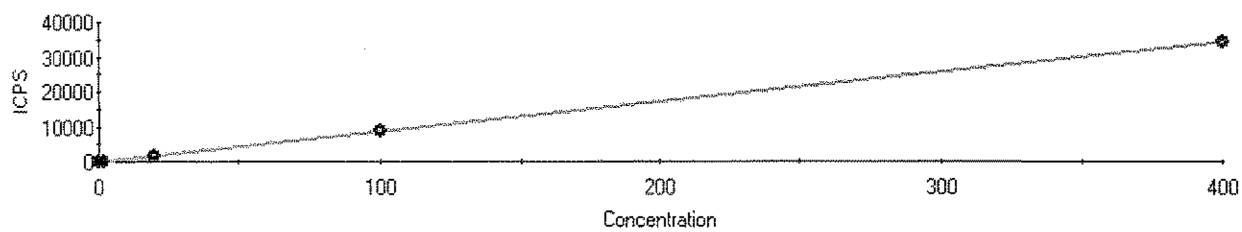
Fully Quant Calibration 60Ni FQ Block 1



Intercept CPS=11.934955 Intercept Conc=0.020654
Sensitivity=577.842791 Correlation Coeff=0.999944

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	11.96	
Cal 1	2.00	1.95	-0.05	1,138.40	-0.05
Cal 2	20.00	19.86	-0.14	11,485.43	-0.14
Cal 3	100.00	100.13	0.13	57,874.04	0.13
Cal 4	400.00	388.57	-11.43	224,544.27	-11.43

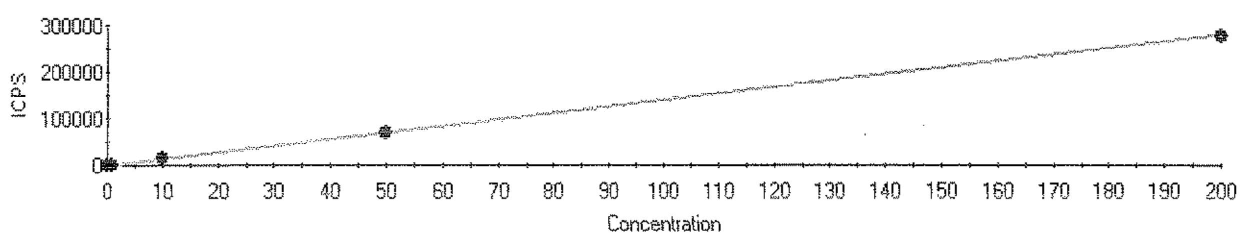
Fully Quant Calibration 62Ni FQ Block 1



Intercept CPS=100.402302 Intercept Conc=1.179163
Sensitivity=85.147101 Correlation Coeff=0.999983

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.20	-0.20	83.74	
Cal 1	2.00	1.43	-0.57	222.08	-0.57
Cal 2	20.00	19.85	-0.15	1,790.74	-0.15
Cal 3	100.00	101.21	1.21	8,717.80	1.21
Cal 4	400.00	399.71	-0.29	34,134.45	-0.29

Fully Quant Calibration 63Cu FQ Block 1

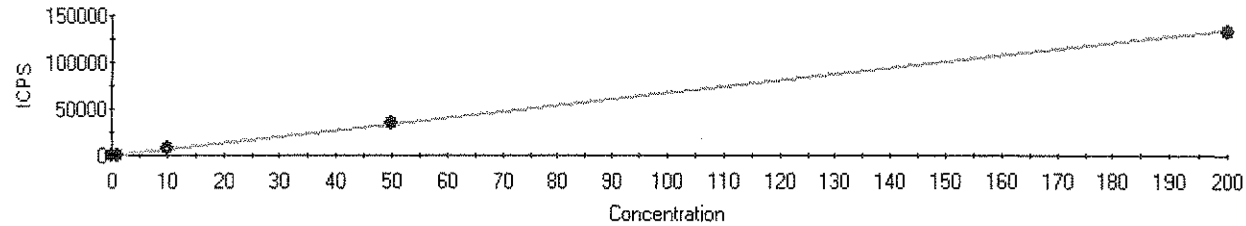


Intercept CPS=132.271709 Intercept Conc=0.094629
Sensitivity=1397.789784 Correlation Coeff=0.999595

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.01	-0.01	120.53	

Cal 1	1.00	1.01	0.01	1,542.59	0.01
Cal 2	10.00	10.08	0.08	14,221.28	0.08
Cal 3	50.00	50.51	0.51	70,739.72	0.51
Cal 4	200.00	197.04	-2.96	275,551.69	-2.96

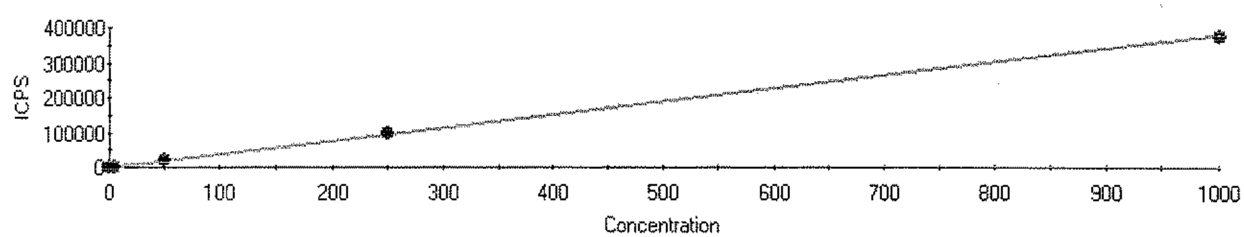
Fully Quant Calibration 65Cu FQ Block 1



Intercept CPS=62.220604 Intercept Conc=0.092160
Sensitivity=675.135183 Correlation Coeff=0.999615

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.03	-0.03	44.47	
Cal 1	1.00	1.05	0.05	772.93	0.05
Cal 2	10.00	10.04	0.04	6,843.85	0.04
Cal 3	50.00	50.40	0.40	34,089.86	0.40
Cal 4	200.00	196.91	-3.09	133,004.56	-3.09

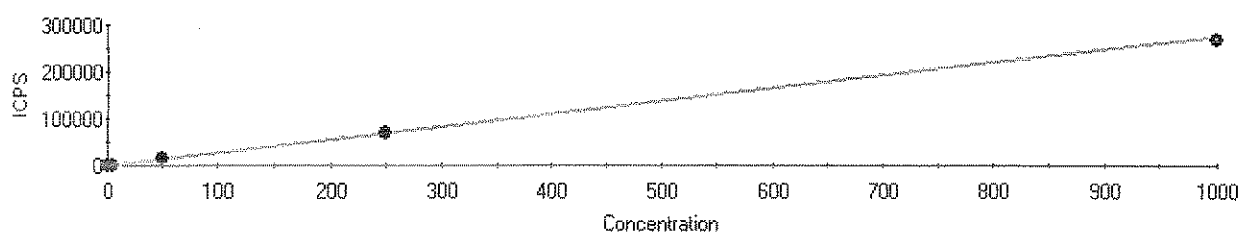
Fully Quant Calibration 66Zn FQ Block 1



Intercept CPS=77.064774 Intercept Conc=0.203001
Sensitivity=379.626724 Correlation Coeff=0.999378

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	76.06	
Cal 1	5.00	5.22	0.22	2,059.65	0.22
Cal 2	50.00	51.00	1.00	19,437.29	1.00
Cal 3	250.00	255.00	5.00	96,883.30	5.00
Cal 4	1,000.00	989.29	-10.71	375,638.10	-10.71

Fully Quant Calibration 68Zn FQ Block 1



Intercept CPS=66.198511 Intercept Conc=0.239040
Sensitivity=276.935334 Correlation Coeff=0.999262

Label	Defined	Measured	Error	Mean CPS	%Error

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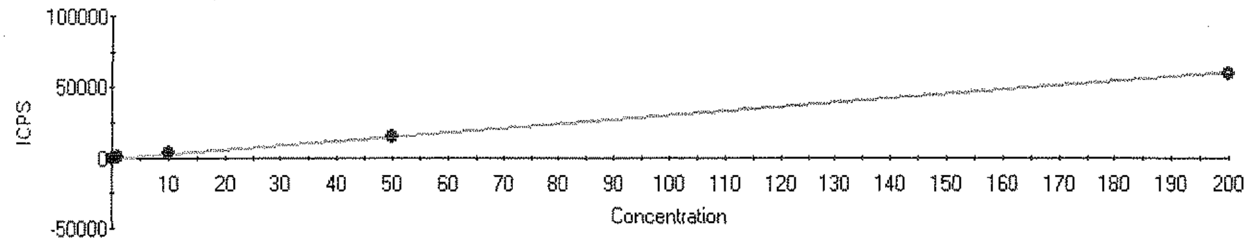
Cal Blank	0.00	-0.01	-0.01	63.27	
Cal 1	5.00	5.02	0.02	1,455.14	0.02
Cal 2	50.00	49.83	-0.17	13,865.08	-0.17
Cal 3	250.00	253.11	3.11	70,160.34	3.11
Cal 4	1,000.00	976.97	-23.03	270,624.79	-23.03

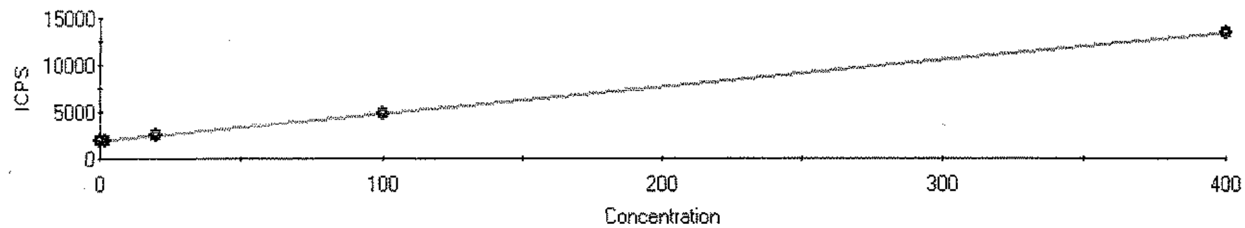
Fully Quant Calibration 75As FQ Block 1



Intercept CPS=-0.547709 Intercept Conc=-0.001819
Sensitivity=301.163230 Correlation Coeff=0.999753

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.25	-0.25	-74.53	
Cal 1	1.00	1.04	0.04	311.99	0.04
Cal 2	10.00	10.10	0.10	3,040.41	0.10
Cal 3	50.00	50.24	0.24	15,130.54	0.24
Cal 4	200.00	198.33	-1.67	59,729.63	-1.67

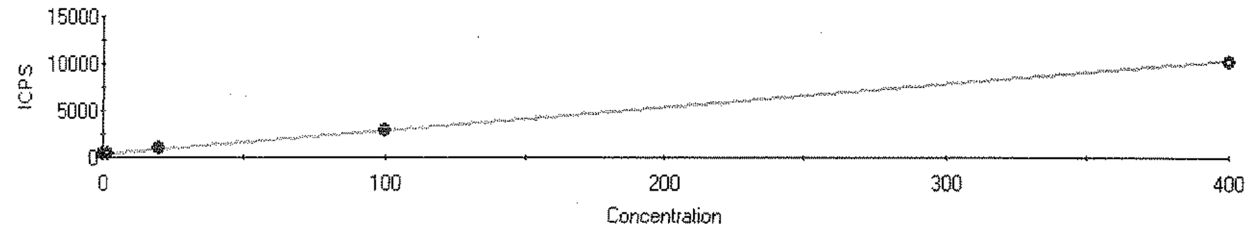
Fully Quant Calibration 76Se FQ Block 1



Intercept CPS=1912.195287 Intercept Conc=65.739086
Sensitivity=29.087647 Correlation Coeff=0.999910

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	2.59	2.59	1,987.48	
Cal 1	2.00	1.28	-0.72	1,949.28	-0.72
Cal 2	20.00	21.63	1.63	2,541.26	1.63
Cal 3	100.00	101.73	1.73	4,871.36	1.73
Cal 4	400.00	399.86	-0.14	13,543.07	-0.14

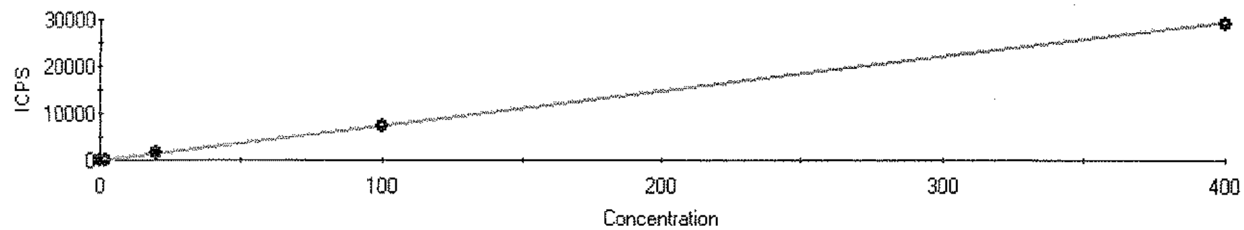
Fully Quant Calibration 77Se FQ Block 1



Intercept CPS=432.253871 Intercept Conc=17.479581
Sensitivity=24.729075 Correlation Coeff=0.999459

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.10	-0.10	429.88	
Cal 1	2.00	1.27	-0.73	463.63	-0.73
Cal 2	20.00	19.75	-0.25	920.73	-0.25
Cal 3	100.00	101.42	1.42	2,940.22	1.42
Cal 4	400.00	393.09	-6.91	10,153.01	-6.91

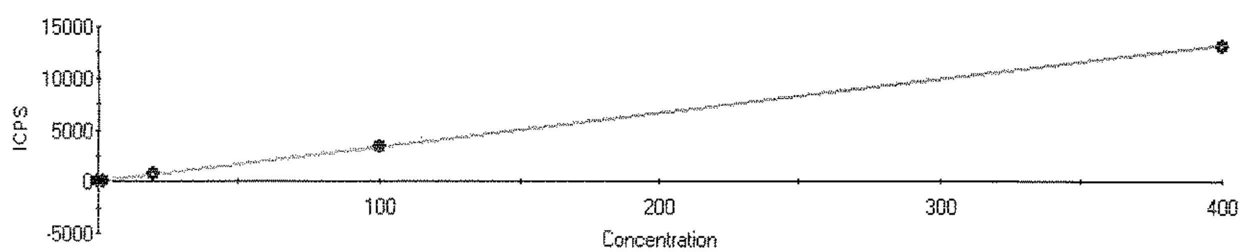
Fully Quant Calibration 78Se FQ Block 1



Intercept CPS=33.558577 Intercept Conc=0.453670
Sensitivity=73.971385 Correlation Coeff=0.999615

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.19	-0.19	19.37	
Cal 1	2.00	2.01	0.01	182.49	0.01
Cal 2	20.00	20.47	0.47	1,547.87	0.47
Cal 3	100.00	100.91	0.91	7,497.74	0.91
Cal 4	400.00	396.93	-3.07	29,394.71	-3.07

Fully Quant Calibration 82Se FQ Block 1



Intercept CPS=-11.329537 Intercept Conc=-0.343020
Sensitivity=33.028748 Correlation Coeff=0.999961

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.01	-0.01	-11.66	
Cal 1	2.00	1.99	-0.01	54.42	-0.01
Cal 2	20.00	20.48	0.48	665.01	0.48
Cal 3	100.00	100.16	0.16	3,296.76	0.16

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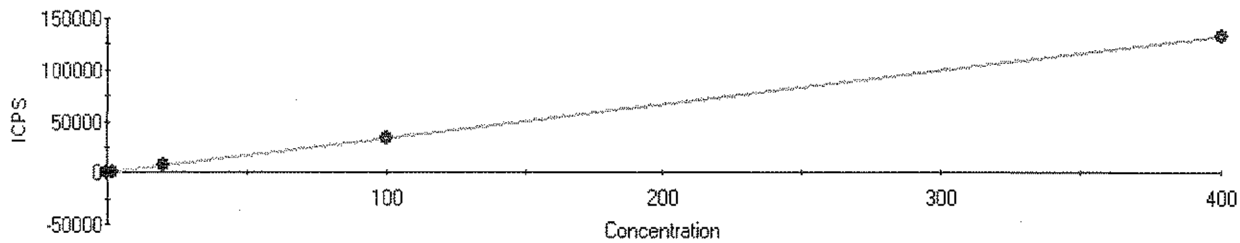
Cal 4	400.00	395.54	-4.46	13,052.81	-4.46

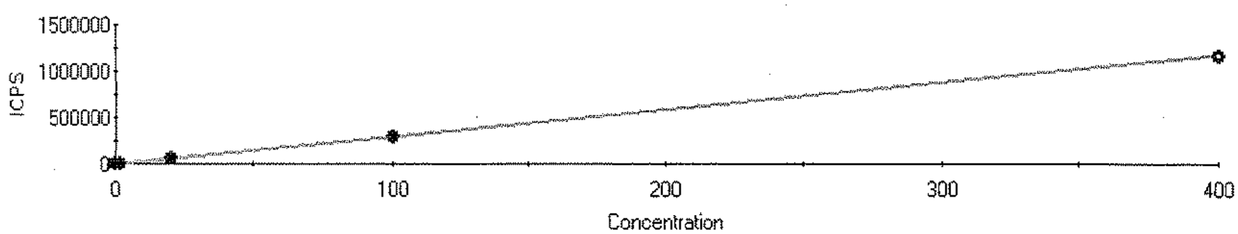
Fully Quant Calibration 86Sr FQ Block 1



Intercept CPS=7.203357 Intercept Conc=0.021734
Sensitivity=331.431769 Correlation Coeff=0.999963

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	6.61	
Cal 1	2.00	2.00	0.00	669.07	0.00
Cal 2	20.00	20.23	0.23	6,712.29	0.23
Cal 3	100.00	100.07	0.07	33,172.62	0.07
Cal 4	400.00	399.35	-0.65	132,363.80	-0.65

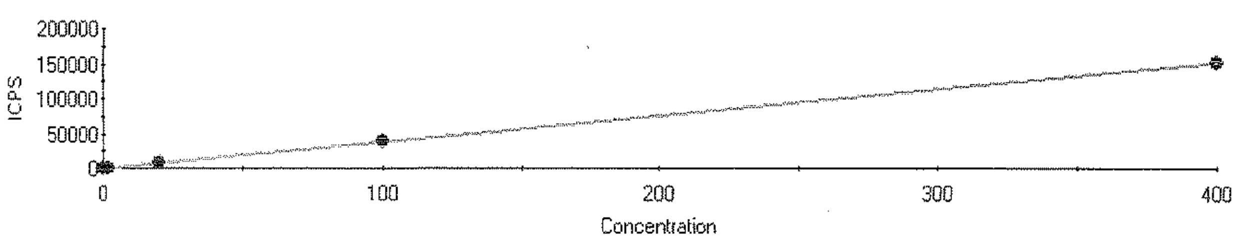
Fully Quant Calibration 88Sr FQ Block 1



Intercept CPS=51.161685 Intercept Conc=0.017359
Sensitivity=2947.206823 Correlation Coeff=0.999993

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	52.15	
Cal 1	2.00	1.96	-0.04	5,835.19	-0.04
Cal 2	20.00	19.88	-0.12	58,627.10	-0.12
Cal 3	100.00	100.04	0.04	294,903.03	0.04
Cal 4	400.00	392.84	-7.16	1,157,836.68	-7.16

Fully Quant Calibration 97Mo FQ Block 1

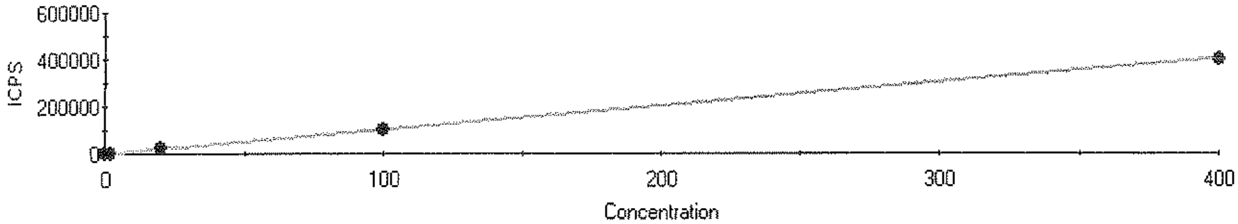


Intercept CPS=24.761535 Intercept Conc=0.065047
Sensitivity=380.673964 Correlation Coeff=0.999558

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	24.74	
Cal 1	2.00	1.97	-0.03	773.59	-0.03
Cal 2	20.00	20.05	0.05	7,655.57	0.05

Cal 3	100.00	101.83	1.83	38,788.06	1.83
Cal 4	400.00	395.33	-4.67	150,517.60	-4.67

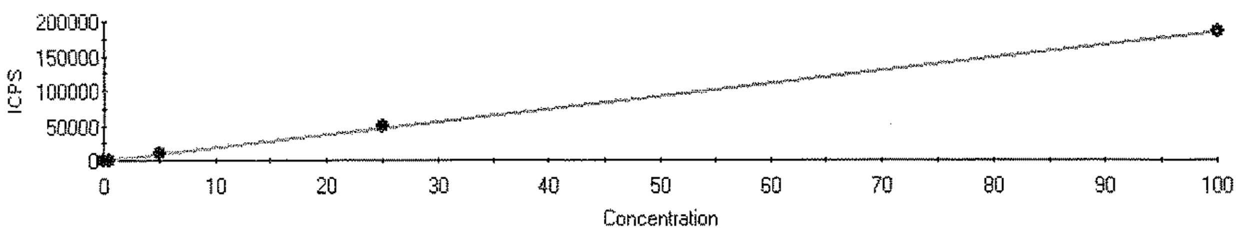
Fully Quant Calibration 98Mo FQ Block 1



Intercept CPS=58.099892 Intercept Conc=0.057155
Sensitivity=1016.528736 Correlation Coeff=0.999995

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	58.00	
Cal 1	2.00	1.96	-0.04	2,052.31	-0.04
Cal 2	20.00	20.15	0.15	20,546.19	0.15
Cal 3	100.00	100.02	0.02	101,728.41	0.02
Cal 4	400.00	391.50	-8.50	398,029.70	-8.50

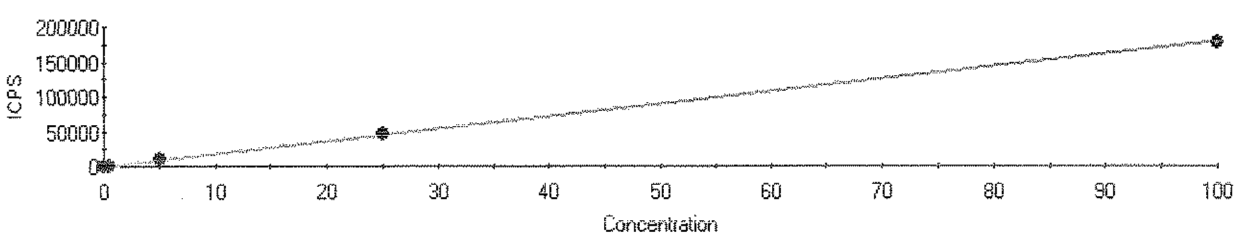
Fully Quant Calibration 107Ag FQ Block 1



Intercept CPS=218.607128 Intercept Conc=0.118237
Sensitivity=1848.882294 Correlation Coeff=0.999275

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	-0.01	-0.01	205.02	
Cal 1	0.50	0.51	0.01	1,166.76	0.01
Cal 2	5.00	5.22	0.22	9,868.46	0.22
Cal 3	25.00	26.06	1.06	48,407.42	1.06
Cal 4	100.00	99.20	-0.80	183,625.04	-0.80

Fully Quant Calibration 109Ag FQ Block 1



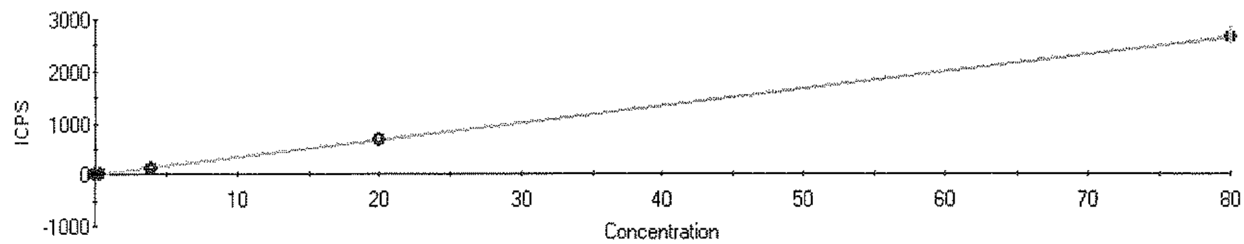
Intercept CPS=187.716650 Intercept Conc=0.105341
Sensitivity=1781.985896 Correlation Coeff=0.998665

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.02	0.02	219.58	
Cal 1	0.50	0.47	-0.03	1,028.28	-0.03

418

Cal 2	5.00	5.16	0.16	9,375.65	0.16
Cal 3	25.00	25.35	0.35	45,365.48	0.35
Cal 4	100.00	98.72	-1.28	176,113.44	-1.28

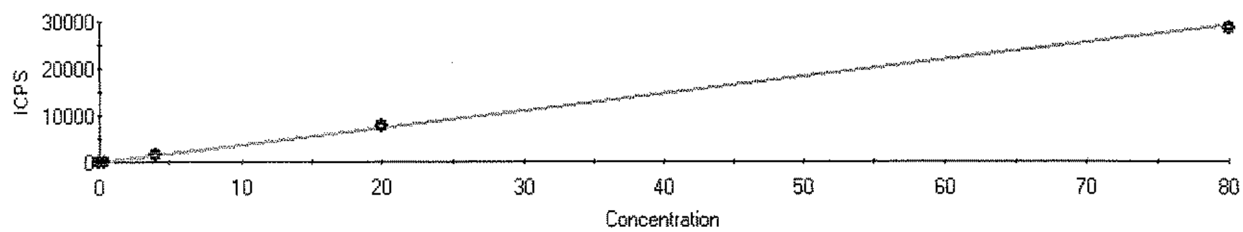
Fully Quant Calibration 106Cd FQ Block 1



Intercept CPS=-2.720931 Intercept Conc=-0.081506
Sensitivity=33.383341 Correlation Coeff=0.999983

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.13	0.13	1.72	
Cal 1	0.40	0.49	0.09	13.59	0.09
Cal 2	4.00	3.77	-0.23	123.07	-0.23
Cal 3	20.00	20.00	0.00	664.91	0.00
Cal 4	80.00	80.01	0.01	2,668.33	0.01

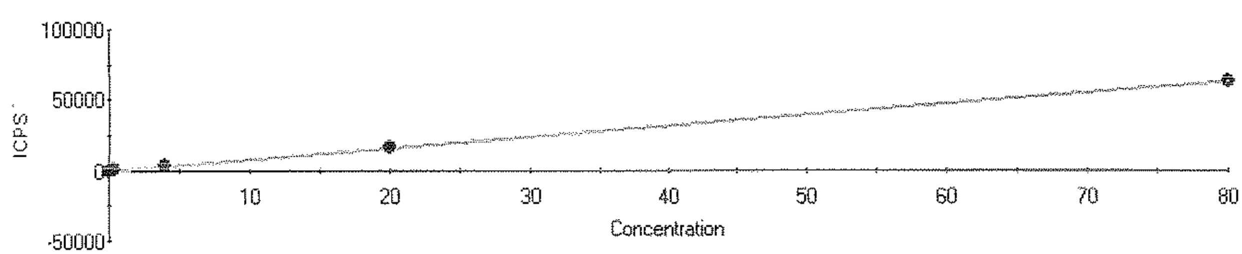
Fully Quant Calibration 111Cd FQ Block 1



Intercept CPS=3.717161 Intercept Conc=0.010113
Sensitivity=367.544806 Correlation Coeff=0.998666

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	3.80	
Cal 1	0.40	0.36	-0.04	137.36	-0.04
Cal 2	4.00	3.92	-0.08	1,442.85	-0.08
Cal 3	20.00	20.46	0.46	7,525.39	0.46
Cal 4	80.00	77.86	-2.14	28,620.72	-2.14

Fully Quant Calibration 114Cd FQ Block 1

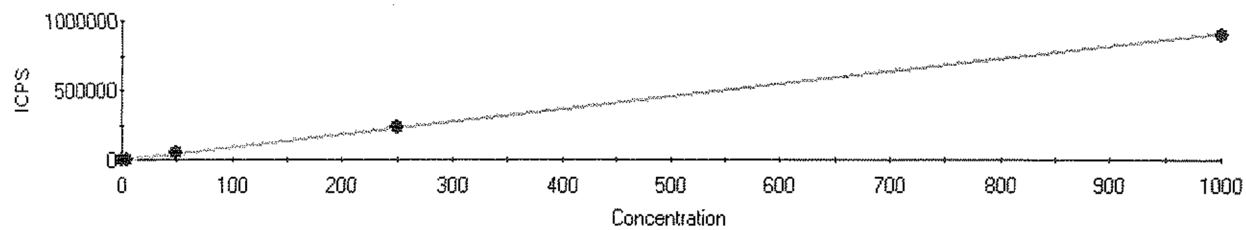


Intercept CPS=-2.110967 Intercept Conc=-0.002696
Sensitivity=782.862435 Correlation Coeff=0.999806

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	-0.69	

Cal 1	0.40	0.40	0.00	309.87	0.00
Cal 2	4.00	4.22	0.22	3,303.59	0.22
Cal 3	20.00	20.70	0.70	16,200.23	0.70
Cal 4	80.00	79.93	-0.07	62,571.90	-0.07

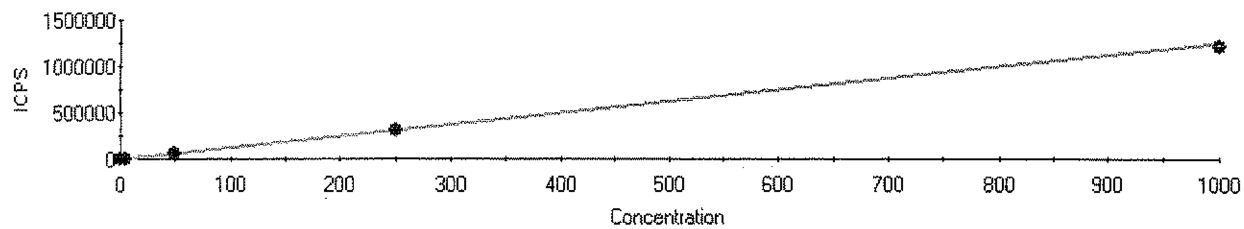
Fully Quant Calibration 118Sn FQ Block 1



Intercept CPS=197.811237 Intercept Conc=0.217268
Sensitivity=910.446149 Correlation Coeff=0.999602

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	195.69	
Cal 1	5.00	5.11	0.11	4,851.41	0.11
Cal 2	50.00	50.52	0.52	46,195.07	0.52
Cal 3	250.00	253.50	3.50	230,997.45	3.50
Cal 4	1,000.00	986.25	-13.75	898,122.78	-13.75

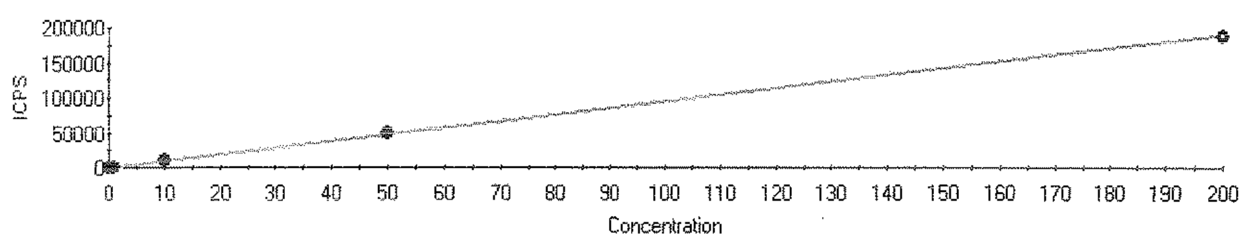
Fully Quant Calibration 120Sn FQ Block 1



Intercept CPS=313.708018 Intercept Conc=0.250996
Sensitivity=1249.852836 Correlation Coeff=0.998989

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	313.68	
Cal 1	5.00	4.99	-0.01	6,552.93	-0.01
Cal 2	50.00	50.47	0.47	63,392.09	0.47
Cal 3	250.00	251.96	1.96	315,221.20	1.96
Cal 4	1,000.00	974.13	-25.87	1,217,834.00	-25.87

Fully Quant Calibration 121Sb FQ Block 1



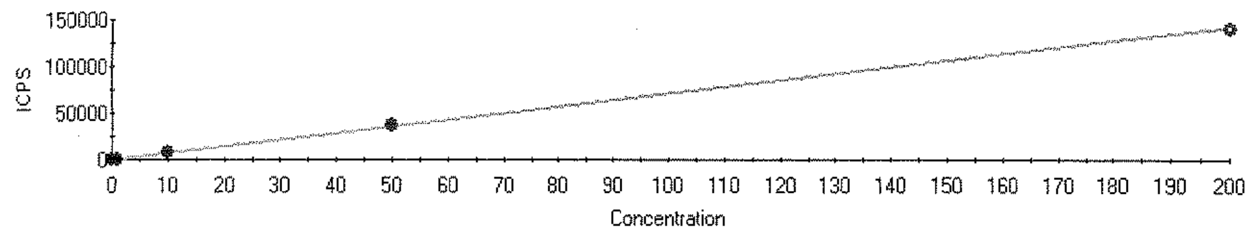
Intercept CPS=28.489926 Intercept Conc=0.029919
Sensitivity=952.230193 Correlation Coeff=0.999304

Label	Defined	Measured	Error	Mean CPS	%Error

420

Cal Blank	0.00	-0.01	-0.01	22.26	
Cal 1	1.00	1.08	0.08	1,056.80	0.08
Cal 2	10.00	9.97	-0.03	9,525.65	-0.03
Cal 3	50.00	50.29	0.29	47,917.37	0.29
Cal 4	200.00	195.93	-4.07	186,599.10	-4.07

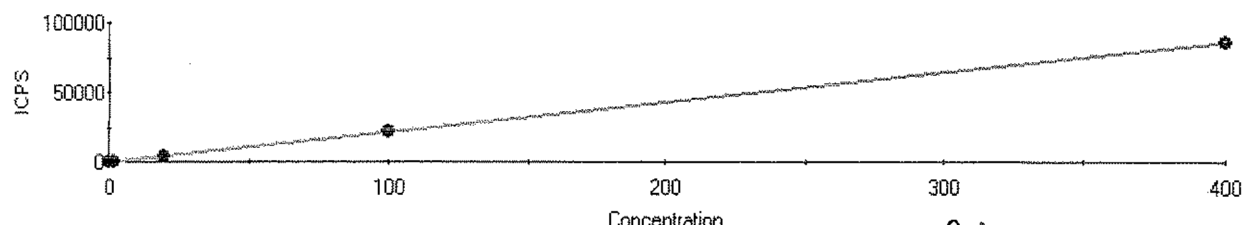
Fully Quant Calibration 123Sb FQ Block 1



Intercept CPS=15.138914 Intercept Conc=0.021162
Sensitivity=715.380615 Correlation Coeff=0.999974

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	14.98	
Cal 1	1.00	1.04	0.04	758.86	0.04
Cal 2	10.00	10.07	0.07	7,216.09	0.07
Cal 3	50.00	50.02	0.02	35,796.63	0.02
Cal 4	200.00	196.65	-3.35	140,698.06	-3.35

Fully Quant Calibration 135Ba FQ Block 1

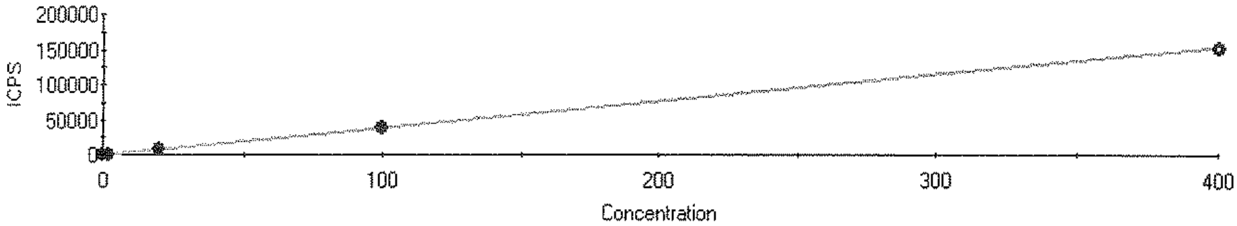


DNR

Intercept CPS=1.040588 Intercept Conc=0.004822
Sensitivity=215.819281 Correlation Coeff=0.994697

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.03	0.03	8.57	
Cal 1	2.00	1.81	-0.19	392.34	-0.19
Cal 2	20.00	20.26	0.26	4,374.44	0.26
Cal 3	100.00	103.09	3.09	22,250.83	3.09
Cal 4	400.00	399.96	-0.04	86,319.89	-0.04

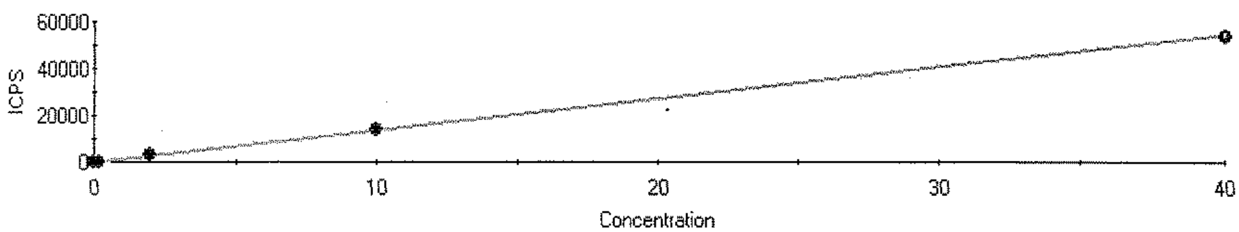
Fully Quant Calibration 137Ba FQ Block 1



Intercept CPS=12.143344 Intercept Conc=0.031515
Sensitivity=385.318126 Correlation Coeff=0.999514

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	11.96	
Cal 1	2.00	2.03	0.03	794.86	0.03
Cal 2	20.00	19.99	-0.01	7,714.92	-0.01
Cal 3	100.00	101.23	1.23	39,016.88	1.23
Cal 4	400.00	394.24	-5.76	151,919.89	-5.76

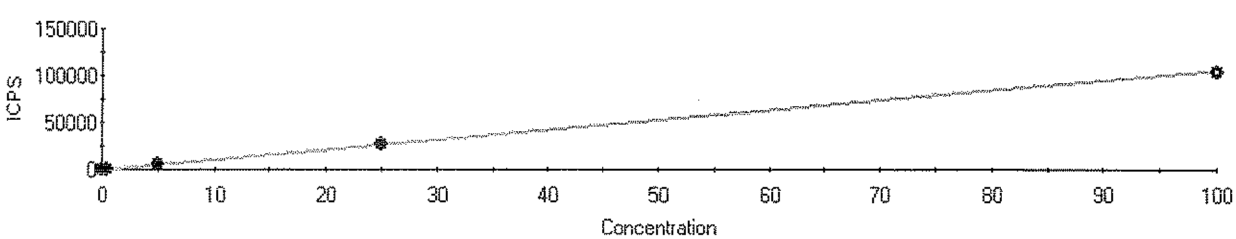
Fully Quant Calibration 203Tl FQ Block 1



Intercept CPS=34.082534 Intercept Conc=0.025061
Sensitivity=1359.999328 Correlation Coeff=0.999656

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	35.06	
Cal 1	0.20	0.19	-0.01	288.56	-0.01
Cal 2	2.00	1.99	-0.01	2,740.02	-0.01
Cal 3	10.00	10.14	0.14	13,823.29	0.14
Cal 4	40.00	39.65	-0.35	53,963.66	-0.35

Fully Quant Calibration 206Pb FQ Block 1

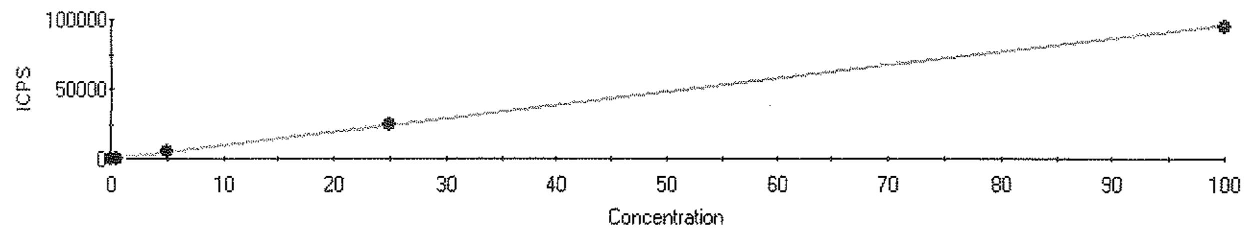


Intercept CPS=8.080318 Intercept Conc=0.007576
Sensitivity=1066.634487 Correlation Coeff=0.997661

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	10.27	
Cal 1	0.50	0.49	-0.01	532.20	-0.01
Cal 2	5.00	5.03	0.03	5,374.80	0.03
Cal 3	25.00	25.78	0.78	27,508.94	0.78

Cal 4	100.00	97.70	-2.30	104,222.35	-2.30

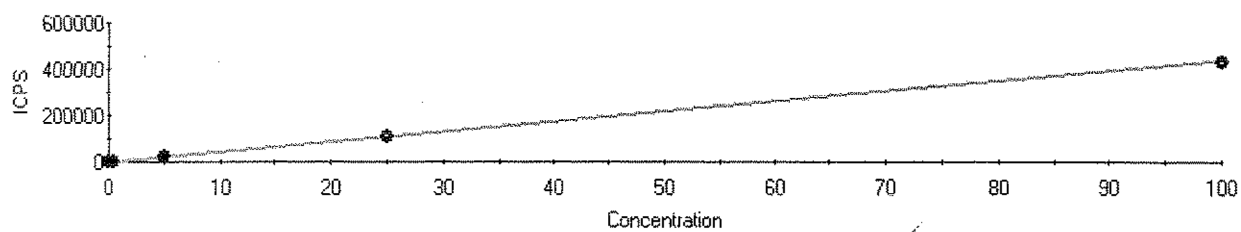
Fully Quant Calibration 207Pb FQ Block 1



Intercept CPS=15.659954 Intercept Conc=0.016356
Sensitivity=957.446621 Correlation Coeff=0.999738

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	15.39	
Cal 1	0.50	0.51	0.01	499.86	0.01
Cal 2	5.00	5.13	0.13	4,927.89	0.13
Cal 3	25.00	25.40	0.40	24,331.42	0.40
Cal 4	100.00	99.28	-0.72	95,071.54	-0.72

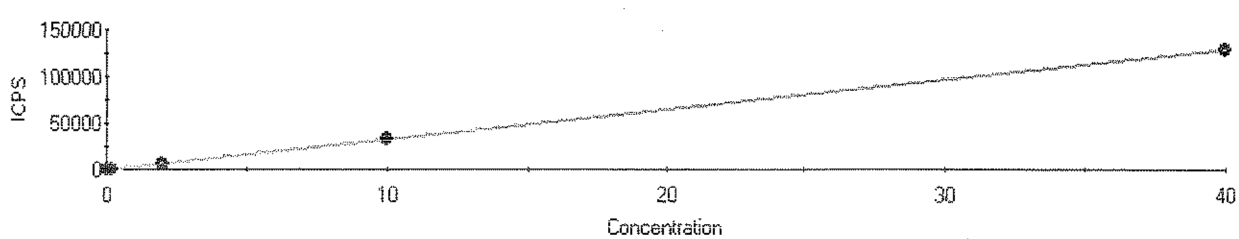
Fully Quant Calibration 208Pb FQ Block 1



Intercept CPS=57.315436 Intercept Conc=0.012961
Sensitivity=4422.192038 Correlation Coeff=0.999533

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	59.00	
Cal 1	0.50	0.50	0.00	2,263.50	0.00
Cal 2	5.00	4.96	-0.04	21,996.99	-0.04
Cal 3	25.00	25.18	0.18	111,407.92	0.18
Cal 4	100.00	96.95	-3.05	428,780.18	-3.05

Fully Quant Calibration 205Tl FQ Block 1



Intercept CPS=98.047311 Intercept Conc=0.030440
Sensitivity=3221.010819 Correlation Coeff=0.999776

Label	Defined	Measured	Error	Mean CPS	%Error
Cal Blank	0.00	0.00	0.00	97.43	
Cal 1	0.20	0.20	0.00	746.36	0.00
Cal 2	2.00	2.02	0.02	6,606.94	0.02

423

Cal 3	10.00	10.20	0.20	32,949.92	0.20
Cal 4	40.00	39.80	-0.20	128,298.47	-0.20

ICP-MS INTERNAL STANDARD SUMMARY SHEET

Data File ID: 032814A

Analyte:	9Be	27Al	47Ti	48Ti	51V	52Cr	55Mn	59Co	60Ni	62Ni	63Cu	65Cu
I.S. Used:	45Sc	45Sc	45Sc	45Sc	45Sc	45Sc	71Ga	71Ga	71Ga	71Ga	71Ga	71Ga
Analyte:	66Zn	68Zn	75As	78Se	82Se	86Sr	88Sr	97Mo	98Mo	107Ag	109Ag	111Cd
I.S. Used:	71Ga	71Ga	71Ga	71Ga	71Ga	71Ga	71Ga	115In	115In	115In	115In	115In
Analyte:	114Cd	118Sn	120Sn	121Sb	123Sb	135Ba	137Ba	203Tl	205Tl	208Pb		
I.S. Used:	115In	159Tb	159Tb	159Tb	159Tb	159Tb	159Tb	175Lu	175Lu	175Lu		

			Internal Standards							
Sample ID	Method	Recovery Limits	6Li Rec	45Sc Rec	71Ga Rec	115In Rec	159Tb Rec	175Lu Rec	209Bi Rec	Anal Date / Time
Cal Blank	N/A	80-120%	98.2%	99.1%	99.6%	98.7%	99.2%	99.6%	98.2%	3/28/2014 13:12
Cal 1	N/A	80-120%	98.7%	101.1%	100.4%	100.2%	98.5%	100.5%	98.1%	3/28/2014 13:17
Cal 2	N/A	80-120%	101.2%	100.1%	102.6%	99.9%	99.5%	100.5%	100.9%	3/28/2014 13:22
Cal 3	N/A	80-120%	101.2%	101.2%	103.6%	102.4%	100.7%	101.6%	101.6%	3/28/2014 13:27
Cal 4	N/A	80-120%	94.2%	95.8%	98.2%	101.0%	98.5%	98.6%	97.0%	3/28/2014 13:32
ICV	N/A	80-120%	99.0%	98.4%	100.9%	99.2%	97.7%	97.8%	97.8%	3/28/2014 13:37
ICB	N/A	80-120%	98.7%	100.8%	100.4%	99.6%	97.6%	97.0%	98.9%	3/28/2014 13:42
MRL	N/A	80-120%	96.0%	101.7%	102.9%	100.2%	98.7%	98.5%	100.3%	3/28/2014 13:47
ICSA	N/A	80-120%	87.9%	92.0%	87.3%	91.4%	91.7%	92.7%	85.1%	3/28/2014 13:52
ICSAB	N/A	80-120%	91.0%	93.5%	92.4%	93.4%	93.6%	95.5%	87.1%	3/28/2014 13:57
CCV-1	N/A	80-120%	101.4%	106.5%	109.3%	105.6%	105.0%	105.6%	105.2%	3/28/2014 14:02
CCB-1	N/A	80-120%	106.2%	109.2%	107.6%	107.5%	104.0%	104.2%	104.2%	3/28/2014 14:08
MB-02258-02	200.8	60-125%	109.2%	113.1%	110.7%	109.2%	107.3%	106.2%	107.1%	3/28/2014 14:13
LCS-02258-01	200.8	60-125%	109.3%	110.4%	111.2%	108.1%	105.8%	107.8%	107.3%	3/28/2014 14:18
J1402025-007	6020	30-120%	108.2%	112.5%	110.1%	106.8%	105.4%	106.0%	102.4%	3/28/2014 14:23
J1402025-007S	6020	30-120%	106.5%	107.2%	106.8%	105.2%	103.2%	105.2%	102.4%	3/28/2014 14:28
J1402025-007SD	6020	30-120%	105.6%	106.0%	104.2%	104.1%	102.1%	103.5%	99.7%	3/28/2014 14:33
J1402025-007L	6020	30-120%	102.6%	107.1%	105.6%	102.9%	102.5%	104.0%	102.6%	3/28/2014 14:38
J1402025-007A	6020	30-120%	103.3%	105.7%	104.8%	101.9%	100.8%	102.7%	100.3%	3/28/2014 14:43
J1402076-001	200.8	60-125%	96.6%	103.7%	99.4%	98.5%	98.3%	101.3%	94.3%	3/28/2014 14:48
J1402076-002	200.8	60-125%	98.0%	103.8%	100.7%	98.8%	100.9%	104.1%	97.1%	3/28/2014 14:53
MB-02293-02 10x	6020	30-120%	105.7%	106.5%	103.4%	101.9%	100.4%	104.0%	101.0%	3/28/2014 14:58
CCV-2	N/A	80-120%	105.4%	102.9%	105.4%	102.4%	101.5%	104.3%	104.0%	3/28/2014 15:03
CCB-2	N/A	80-120%	98.4%	101.1%	101.4%	98.8%	98.3%	100.4%	101.9%	3/28/2014 15:08
LCS-02293-01 10x	6020	30-120%	107.4%	103.2%	104.6%	100.7%	100.4%	102.0%	100.0%	3/28/2014 15:13
J1402083-001 10x	6020	30-120%	101.1%	102.4%	103.4%	100.3%	99.2%	100.5%	99.3%	3/28/2014 15:18
J1402083-001L 10x	6020	30-120%	105.3%	102.4%	103.3%	100.5%	99.1%	101.2%	104.1%	3/28/2014 15:23
J1402083-001A 10x	6020	30-120%	107.1%	104.9%	104.3%	101.3%	100.6%	103.4%	100.9%	3/28/2014 15:28
J1402197-001 10x	6020	30-120%	95.7%	100.7%	100.9%	98.9%	98.3%	100.9%	101.9%	3/28/2014 15:33
CCV-3	N/A	80-120%	101.3%	102.6%	104.2%	102.2%	102.5%	103.5%	104.7%	3/28/2014 15:38
CCB-3	N/A	80-120%	103.0%	101.3%	100.8%	98.9%	100.4%	101.4%	102.5%	3/28/2014 15:43
Acid Rinse	N/A	80-120%	98.4%	104.6%	104.0%	102.9%	101.9%	103.6%	106.6%	3/28/2014 15:48
DI Rinse	N/A	80-120%	97.2%	104.2%	102.7%	101.7%	100.9%	102.2%	104.7%	3/28/2014 15:53

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
Cal Blank	Y	9Be	0.04	1	99.1	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	27Al	0.00	1	99.1	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	47Ti	0.00	1	99.1	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	48Ti	0.01	1	99.1	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	51V	0.45	1	99.1	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	52Cr	0.04	1	99.1	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	55Mn	0.00	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	59Co	0.00	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	60Ni	0.00	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	62Ni	-0.20	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	63Cu	-0.01	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	65Cu	-0.03	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	66Zn	0.00	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	68Zn	-0.01	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	75As	-0.25	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	78Se	-0.19	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	82Se	-0.01	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	86Sr	0.00	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	88Sr	0.00	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	97Mo	0.00	1	98.7	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	98Mo	0.00	1	98.7	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	107Ag	-0.01	1	98.7	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	109Ag	0.02	1	98.7	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	111Cd	0.00	1	98.7	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	114Cd	0.00	1	98.7	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	118Sn	0.00	1	99.2	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	120Sn	0.00	1	99.2	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	121Sb	-0.01	1	99.2	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	123Sb	0.00	1	99.2	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	135Ba	0.04	1	99.2	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	137Ba	0.00	1	99.2	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	203Tl	0.00	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	205Tl	0.00	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal Blank	Y	208Pb	0.00	1	99.6	3/28/2014	13:12	ICAL	ICAL	N/A	
Cal 1	Y	9Be	0.46	1	101.1	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	27Al	48.20	1	101.1	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	47Ti	5.06	1	101.1	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	48Ti	4.93	1	101.1	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	51V	2.00	1	101.1	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	52Cr	0.97	1	101.1	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	55Mn	2.01	1	100.4	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	59Co	1.00	1	100.4	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	60Ni	1.95	1	100.4	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	62Ni	1.43	1	100.4	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	63Cu	1.01	1	100.4	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	65Cu	1.05	1	100.4	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	66Zn	5.22	1	100.4	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	68Zn	5.02	1	100.4	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	75As	1.04	1	100.4	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	78Se	2.01	1	100.4	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	82Se	1.99	1	100.4	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	86Sr	2.00	1	100.4	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	88Sr	1.96	1	100.4	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	97Mo	1.97	1	100.2	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	98Mo	1.96	1	100.2	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	107Ag	0.51	1	100.2	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	109Ag	0.47	1	100.2	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	111Cd	0.36	1	100.2	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	114Cd	0.40	1	100.2	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	118Sn	5.11	1	98.5	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	120Sn	4.99	1	98.5	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	121Sb	1.08	1	98.5	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	123Sb	1.04	1	98.5	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	135Ba	1.81	1	98.5	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	137Ba	2.03	1	98.5	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	203Tl	0.19	1	100.5	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	205Tl	0.20	1	100.5	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 1	Y	208Pb	0.50	1	100.5	3/28/2014	13:17	ICAL	ICAL	N/A	
Cal 2	Y	9Be	5.13	1	100.1	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	27Al	504.70	1	100.1	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	47Ti	51.07	1	100.1	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	48Ti	50.21	1	100.1	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	51V	19.72	1	100.1	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	52Cr	9.95	1	100.1	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	55Mn	20.01	1	102.6	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	59Co	9.95	1	102.6	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	60Ni	19.86	1	102.6	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	62Ni	19.85	1	102.6	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	63Cu	10.08	1	102.6	3/28/2014	13:22	ICAL	ICAL	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
Cal 2	Y	65Cu	10.04	1	102.6	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	66Zn	51.00	1	102.6	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	68Zn	49.83	1	102.6	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	75As	10.10	1	102.6	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	78Se	20.47	1	102.6	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	82Se	20.48	1	102.6	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	86Sr	20.23	1	102.6	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	88Sr	19.88	1	102.6	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	97Mo	20.05	1	99.9	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	98Mo	20.15	1	99.9	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	107Ag	5.22	1	99.9	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	109Ag	5.16	1	99.9	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	111Cd	3.92	1	99.9	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	114Cd	4.22	1	99.9	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	118Sn	50.52	1	99.5	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	120Sn	50.47	1	99.5	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	121Sb	9.97	1	99.5	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	123Sb	10.07	1	99.5	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	135Ba	20.26	1	99.5	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	137Ba	19.99	1	99.5	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	203Tl	1.99	1	100.5	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	205Tl	2.02	1	100.5	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 2	Y	208Pb	4.96	1	100.5	3/28/2014	13:22	ICAL	ICAL	N/A	
Cal 3	Y	9Be	25.12	1	101.2	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	27Al	2489.00	1	101.2	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	47Ti	249.20	1	101.2	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	48Ti	251.60	1	101.2	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	51V	101.90	1	101.2	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	52Cr	50.72	1	101.2	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	55Mn	100.80	1	103.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	59Co	50.68	1	103.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	60Ni	100.10	1	103.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	62Ni	101.20	1	103.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	63Cu	50.51	1	103.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	65Cu	50.40	1	103.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	66Zn	255.00	1	103.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	68Zn	253.10	1	103.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	75As	50.24	1	103.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	78Se	100.90	1	103.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	82Se	100.20	1	103.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	86Sr	100.10	1	103.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	88Sr	100.00	1	103.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	97Mo	101.80	1	102.4	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	98Mo	100.00	1	102.4	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	107Ag	26.06	1	102.4	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	109Ag	25.35	1	102.4	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	111Cd	20.46	1	102.4	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	114Cd	20.70	1	102.4	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	118Sn	253.50	1	100.7	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	120Sn	252.00	1	100.7	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	121Sb	50.29	1	100.7	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	123Sb	50.02	1	100.7	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	135Ba	103.10	1	100.7	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	137Ba	101.20	1	100.7	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	203Tl	10.14	1	101.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	205Tl	10.20	1	101.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 3	Y	208Pb	25.18	1	101.6	3/28/2014	13:27	ICAL	ICAL	N/A	
Cal 4	Y	9Be	92.66	1	95.8	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	27Al	10030.00	1	95.8	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	47Ti	1001.00	1	95.8	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	48Ti	1000.00	1	95.8	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	51V	396.70	1	95.8	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	52Cr	199.70	1	95.8	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	55Mn	395.10	1	98.2	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	59Co	199.90	1	98.2	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	60Ni	388.60	1	98.2	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	62Ni	399.70	1	98.2	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	63Cu	197.00	1	98.2	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	65Cu	196.90	1	98.2	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	66Zn	989.30	1	98.2	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	68Zn	977.00	1	98.2	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	75As	198.30	1	98.2	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	78Se	396.90	1	98.2	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	82Se	395.50	1	98.2	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	86Sr	399.30	1	98.2	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	88Sr	392.80	1	98.2	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	97Mo	395.30	1	101	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	98Mo	391.50	1	101	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	107Ag	99.20	1	101	3/28/2014	13:32	ICAL	ICAL	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
Cal 4	Y	**109Ag**	98.72	1	101	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	111Cd	77.86	1	101	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	**114Cd**	79.93	1	101	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	**118Sn**	986.20	1	98.5	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	120Sn	974.10	1	98.5	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	121Sb	195.90	1	98.5	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	**123Sb**	196.70	1	98.5	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	135Ba	400.00	1	98.5	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	**137Ba**	394.20	1	98.5	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	203Tl	39.65	1	98.6	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	**205Tl**	39.80	1	98.6	3/28/2014	13:32	ICAL	ICAL	N/A	
Cal 4	Y	**208Pb**	96.95	1	98.6	3/28/2014	13:32	ICAL	ICAL	N/A	
ICV	Y	**9Be**	18.70	1	98.4	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**27Al**	508.70	1	98.4	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**47Ti**	249.70	1	98.4	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	48Ti	248.30	1	98.4	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**51V**	98.26	1	98.4	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**52Cr**	50.22	1	98.4	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**55Mn**	49.72	1	100.9	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**59Co**	49.56	1	100.9	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**60Ni**	49.49	1	100.9	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	62Ni	50.03	1	100.9	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	63Cu	50.12	1	100.9	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**65Cu**	49.72	1	100.9	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**66Zn**	101.50	1	100.9	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	68Zn	99.70	1	100.9	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**75As**	50.48	1	100.9	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**78Se**	50.41	1	100.9	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	82Se	50.06	1	100.9	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**86Sr**	50.49	1	100.9	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	88Sr	49.16	1	100.9	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	97Mo	51.07	1	99.2	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**98Mo**	50.94	1	99.2	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	107Ag	51.14	1	99.2	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**109Ag**	50.99	1	99.2	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	111Cd	24.83	1	99.2	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**114Cd**	25.35	1	99.2	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**118Sn**	205.20	1	97.7	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	120Sn	203.40	1	97.7	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	121Sb	49.68	1	97.7	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**123Sb**	50.36	1	97.7	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	135Ba	50.60	1	97.7	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**137Ba**	50.47	1	97.7	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	203Tl	48.23	1	97.8	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**205Tl**	48.69	1	97.8	3/28/2014	13:37	ICV	ICV	N/A	
ICV	Y	**208Pb**	48.32	1	97.8	3/28/2014	13:37	ICV	ICV	N/A	
ICB	Y	**9Be**	0.03	1	100.8	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**27Al**	-0.06	1	100.8	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**47Ti**	0.09	1	100.8	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	48Ti	0.12	1	100.8	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**51V**	0.42	1	100.8	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**52Cr**	-0.10	1	100.8	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**55Mn**	0.00	1	100.4	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**59Co**	0.00	1	100.4	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**60Ni**	0.00	1	100.4	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	62Ni	-0.42	1	100.4	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	63Cu	-0.02	1	100.4	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**65Cu**	-0.03	1	100.4	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**66Zn**	0.00	1	100.4	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	68Zn	0.03	1	100.4	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**75As**	-0.20	1	100.4	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**78Se**	-0.19	1	100.4	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	82Se	0.31	1	100.4	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**86Sr**	0.02	1	100.4	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	88Sr	0.00	1	100.4	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	97Mo	0.37	1	99.6	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**98Mo**	0.35	1	99.6	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	107Ag	-0.01	1	99.6	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**109Ag**	0.03	1	99.6	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	111Cd	0.00	1	99.6	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**114Cd**	0.01	1	99.6	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**118Sn**	1.92	1	97.6	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	120Sn	1.79	1	97.6	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	121Sb	0.51	1	97.6	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**123Sb**	0.56	1	97.6	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	135Ba	0.02	1	97.6	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	137Ba	-0.01	1	97.6	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	203Tl	0.01	1	97	3/28/2014	13:42	CCB	CCB	N/A	
ICB	Y	**205Tl**	0.00	1	97	3/28/2014	13:42	CCB	CCB	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
ICB	Y	208Pb	0.00	1	97	3/28/2014	13:42	CCB	CCB	N/A	
MRL	Y	9Be	0.50	1	101.7	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	27Al	47.97	1	101.7	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	47Ti	5.36	1	101.7	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	48Ti	5.00	1	101.7	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	51V	2.24	1	101.7	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	52Cr	0.89	1	101.7	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	55Mn	2.04	1	102.9	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	59Co	1.02	1	102.9	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	60Ni	1.98	1	102.9	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	62Ni	1.96	1	102.9	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	63Cu	1.01	1	102.9	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	65Cu	0.97	1	102.9	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	66Zn	5.28	1	102.9	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	68Zn	5.20	1	102.9	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	75As	1.24	1	102.9	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	78Se	1.88	1	102.9	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	82Se	2.27	1	102.9	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	86Sr	2.02	1	102.9	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	88Sr	1.98	1	102.9	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	97Mo	1.96	1	100.2	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	98Mo	2.04	1	100.2	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	107Ag	0.51	1	100.2	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	109Ag	0.50	1	100.2	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	111Cd	0.33	1	100.2	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	114Cd	0.44	1	100.2	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	118Sn	5.79	1	98.7	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	120Sn	5.91	1	98.7	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	121Sb	1.23	1	98.7	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	123Sb	1.22	1	98.7	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	135Ba	2.22	1	98.7	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	137Ba	2.02	1	98.7	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	203Tl	0.20	1	98.5	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	205Tl	0.20	1	98.5	3/28/2014	13:47	MRL	MRL	N/A	
MRL	Y	208Pb	0.52	1	98.5	3/28/2014	13:47	MRL	MRL	N/A	
ICSA	Y	9Be	0.03	1	92	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	27Al	52520.00	1	92	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	47Ti	1087.00	1	92	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	48Ti	1078.00	1	92	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	51V	0.17	1	92	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	52Cr	0.74	1	92	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	55Mn	0.32	1	87.3	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	59Co	0.07	1	87.3	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	60Ni	0.52	1	87.3	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	62Ni	4.31	1	87.3	3/28/2014	13:52	ICS-A	ICS-A	N/A	ICS-A FH.
ICSA	Y	63Cu	0.80	1	87.3	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	65Cu	0.63	1	87.3	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	66Zn	1.70	1	87.3	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	68Zn	0.95	1	87.3	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	75As	0.51	1	87.3	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	78Se	0.96	1	87.3	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	82Se	-0.51	1	87.3	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	86Sr	0.33	1	87.3	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	88Sr	0.39	1	87.3	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	97Mo	1051.00	1	91.4	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	98Mo	1047.00	1	91.4	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	107Ag	0.02	1	91.4	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	109Ag	0.05	1	91.4	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	111Cd	0.18	1	91.4	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	114Cd	0.27	1	91.4	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	118Sn	0.54	1	91.7	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	120Sn	0.54	1	91.7	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	121Sb	0.13	1	91.7	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	123Sb	0.12	1	91.7	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	135Ba	0.12	1	91.7	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	137Ba	0.08	1	91.7	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	203Tl	-0.01	1	92.7	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	205Tl	-0.02	1	92.7	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSA	Y	208Pb	0.10	1	92.7	3/28/2014	13:52	ICS-A	ICS-A	N/A	
ICSAB	Y	9Be	9.24	1	93.5	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	27Al	53680.00	1	93.5	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	47Ti	1210.00	1	93.5	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	48Ti	1191.00	1	93.5	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	51V	41.15	1	93.5	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	52Cr	21.68	1	93.5	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	55Mn	40.75	1	92.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	59Co	20.49	1	92.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	60Ni	39.15	1	92.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	62Ni	44.66	1	92.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
ICSAB	Y	63Cu	20.01	1	92.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	65Cu	20.16	1	92.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	66Zn	98.77	1	92.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	68Zn	98.34	1	92.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	75As	20.70	1	92.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	78Se	41.92	1	92.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	82Se	39.35	1	92.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	86Sr	44.36	1	92.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	88Sr	43.59	1	92.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	97Mo	1118.00	1	93.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	98Mo	1099.00	1	93.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	107Ag	10.01	1	93.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	109Ag	9.82	1	93.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	111Cd	7.81	1	93.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	114Cd	8.13	1	93.4	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	118Sn	106.00	1	93.6	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	120Sn	105.20	1	93.6	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	121Sb	20.64	1	93.6	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	123Sb	20.89	1	93.6	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	135Ba	43.04	1	93.6	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	137Ba	42.54	1	93.6	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	203Tl	3.99	1	95.5	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	205Tl	3.97	1	95.5	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
ICSAB	Y	208Pb	9.91	1	95.5	3/28/2014	13:57	ICS-AB	ICS-AB	N/A	
CCV-1	Y	9Be	24.11	1	106.5	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	27Al	2528.00	1	106.5	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	47Ti	252.30	1	106.5	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	48Ti	257.30	1	106.5	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	51V	101.00	1	106.5	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	52Cr	50.60	1	106.5	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	55Mn	101.20	1	109.3	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	59Co	51.28	1	109.3	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	60Ni	100.20	1	109.3	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	N	62Ni	104.30	1	109.3	3/28/2014	14:02	CCV	CCV	N/A	ICS-A FH,
CCV-1	Y	63Cu	51.03	1	109.3	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	65Cu	50.75	1	109.3	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	66Zn	258.10	1	109.3	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	68Zn	251.40	1	109.3	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	75As	50.69	1	109.3	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	78Se	101.30	1	109.3	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	82Se	101.20	1	109.3	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	86Sr	102.30	1	109.3	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	88Sr	100.20	1	109.3	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	97Mo	104.40	1	105.6	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	98Mo	103.60	1	105.6	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	107Ag	25.79	1	105.6	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	109Ag	25.67	1	105.6	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	111Cd	19.91	1	105.6	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	114Cd	21.05	1	105.6	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	118Sn	253.70	1	105	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	120Sn	254.30	1	105	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	121Sb	50.77	1	105	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	123Sb	50.54	1	105	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	135Ba	104.50	1	105	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	137Ba	102.50	1	105	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	203Tl	10.03	1	105.6	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	205Tl	10.30	1	105.6	3/28/2014	14:02	CCV	CCV	N/A	
CCV-1	Y	208Pb	24.83	1	105.6	3/28/2014	14:02	CCV	CCV	N/A	
CCB-1	Y	9Be	0.01	1	109.2	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	27Al	-0.02	1	109.2	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	47Ti	0.15	1	109.2	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	48Ti	0.16	1	109.2	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	51V	-0.01	1	109.2	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	52Cr	-0.17	1	109.2	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	55Mn	0.01	1	107.6	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	59Co	0.00	1	107.6	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	60Ni	0.01	1	107.6	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	N	62Ni	0.18	1	107.6	3/28/2014	14:08	CCB	CCB	N/A	ICS-A FH,
CCB-1	Y	63Cu	0.01	1	107.6	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	65Cu	-0.03	1	107.6	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	66Zn	-0.02	1	107.6	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	68Zn	-0.04	1	107.6	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	75As	-0.32	1	107.6	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	78Se	-0.12	1	107.6	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	82Se	0.17	1	107.6	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	86Sr	0.00	1	107.6	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	88Sr	0.00	1	107.6	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	97Mo	0.75	1	107.5	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	98Mo	0.65	1	107.5	3/28/2014	14:08	CCB	CCB	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
CCB-1	Y	107Ag	-0.04	1	107.5	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	**109Ag**	-0.01	1	107.5	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	111Cd	-0.01	1	107.5	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	**114Cd**	0.01	1	107.5	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	**118Sn**	1.11	1	104	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	120Sn	1.07	1	104	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	121Sb	0.18	1	104	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	**123Sb**	0.21	1	104	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	135Ba	0.02	1	104	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	**137Ba**	-0.01	1	104	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	203Tl	0.01	1	104.2	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	**205Tl**	0.01	1	104.2	3/28/2014	14:08	CCB	CCB	N/A	
CCB-1	Y	**208Pb**	0.00	1	104.2	3/28/2014	14:08	CCB	CCB	N/A	
MB-02258-02	Y	**9Be**	0.01	1	113.1	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**27Al**	2.04	1	113.1	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**47Ti**	0.05	1	113.1	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	N	48Ti	0.13	1	113.1	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**51V**	-0.15	1	113.1	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**52Cr**	-0.11	1	113.1	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**55Mn**	0.38	1	110.7	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**59Co**	0.00	1	110.7	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**60Ni**	0.15	1	110.7	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	N	62Ni	-0.02	1	110.7	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	ICS-A FH,
MB-02258-02	N	63Cu	0.00	1	110.7	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**65Cu**	-0.01	1	110.7	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**66Zn**	3.19	1	110.7	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	N	68Zn	2.94	1	110.7	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**75As**	-0.08	1	110.7	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**78Se**	-0.03	1	110.7	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	N	82Se	0.19	1	110.7	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**86Sr**	0.16	1	110.7	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	N	88Sr	0.12	1	110.7	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	N	97Mo	0.28	1	109.2	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**98Mo**	0.31	1	109.2	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	N	107Ag	-0.03	1	109.2	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**109Ag**	-0.03	1	109.2	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	N	111Cd	-0.01	1	109.2	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**114Cd**	0.01	1	109.2	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**118Sn**	0.47	1	107.3	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	N	120Sn	0.41	1	107.3	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	N	121Sb	0.07	1	107.3	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**123Sb**	0.09	1	107.3	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	N	135Ba	0.08	1	107.3	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**137Ba**	0.02	1	107.3	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	N	203Tl	-0.01	1	106.2	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**205Tl**	-0.02	1	106.2	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
MB-02258-02	Y	**208Pb**	0.00	1	106.2	3/28/2014	14:13	MBLK	JQ1402258-02	200.8 D	
LCS-02258-01	Y	**9Be**	24.22	1	110.4	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**27Al**	2594.00	1	110.4	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**47Ti**	259.00	1	110.4	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	N	48Ti	260.60	1	110.4	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**51V**	101.70	1	110.4	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**52Cr**	52.27	1	110.4	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**55Mn**	106.90	1	111.2	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**59Co**	52.43	1	111.2	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**60Ni**	102.70	1	111.2	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	N	62Ni	104.60	1	111.2	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	ICS-A FH,
LCS-02258-01	N	63Cu	52.19	1	111.2	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**65Cu**	51.40	1	111.2	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**66Zn**	259.50	1	111.2	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	N	68Zn	256.70	1	111.2	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**75As**	51.16	1	111.2	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**78Se**	100.80	1	111.2	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	N	82Se	102.30	1	111.2	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**86Sr**	103.10	1	111.2	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	N	88Sr	102.10	1	111.2	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	N	97Mo	106.90	1	108.1	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**98Mo**	104.90	1	108.1	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	N	107Ag	26.41	1	108.1	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**109Ag**	26.14	1	108.1	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	N	111Cd	20.69	1	108.1	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**114Cd**	20.66	1	108.1	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**118Sn**	259.70	1	105.8	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	N	120Sn	258.60	1	105.8	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	N	121Sb	51.72	1	105.8	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**123Sb**	52.31	1	105.8	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	N	135Ba	106.90	1	105.8	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	**137Ba**	104.70	1	105.8	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	N	203Tl	10.20	1	107.8	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
LCS-02258-01	Y	205Tl	10.20	1	107.8	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
LCS-02258-01	Y	208Pb	25.66	1	107.8	3/28/2014	14:18	LCS	JQ1402258-01	200.8 D	
J1402025-007	Y	9Be	0.02	1	112.5	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	27Al	17.50	1	112.5	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	47Ti	0.75	1	112.5	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	N	48Ti	31.77	1	112.5	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	51V	0.29	1	112.5	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	52Cr	0.55	1	112.5	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	55Mn	11.18	1	110.1	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	59Co	0.11	1	110.1	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	60Ni	32.12	1	110.1	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	N	62Ni	32.70	1	110.1	3/28/2014	14:23	SAMP	J1402025-007	6020 D	ICS-A FH,
J1402025-007	N	63Cu	0.62	1	110.1	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	65Cu	0.61	1	110.1	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	66Zn	5.95	1	110.1	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	N	68Zn	6.88	1	110.1	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	75As	0.62	1	110.1	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	78Se	0.16	1	110.1	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	N	82Se	0.06	1	110.1	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	86Sr	253.70	1	110.1	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	N	88Sr	252.40	1	110.1	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	N	97Mo	1.96	1	106.8	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	98Mo	1.82	1	106.8	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	N	107Ag	-0.03	1	106.8	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	109Ag	-0.03	1	106.8	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	N	111Cd	0.66	1	106.8	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	114Cd	0.57	1	106.8	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	118Sn	1.27	1	105.4	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	N	120Sn	1.31	1	105.4	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	N	121Sb	0.37	1	105.4	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	123Sb	0.38	1	105.4	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	N	135Ba	28.93	1	105.4	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	137Ba	29.25	1	105.4	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	N	203Tl	0.04	1	106	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	205Tl	0.03	1	106	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007	Y	208Pb	0.02	1	106	3/28/2014	14:23	SAMP	J1402025-007	6020 D	
J1402025-007S	Y	9Be	23.26	1	107.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	27Al	2460.00	1	107.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	47Ti	255.10	1	107.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	N	48Ti	287.20	1	107.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	51V	99.63	1	107.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	52Cr	52.40	1	107.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	55Mn	113.40	1	106.8	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	59Co	51.16	1	106.8	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	60Ni	132.40	1	106.8	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	N	62Ni	136.00	1	106.8	3/28/2014	14:28	MS	JQ1402258-03	6020 D	ICS-A FH,
J1402025-007S	N	63Cu	50.84	1	106.8	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	65Cu	50.88	1	106.8	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	66Zn	256.50	1	106.8	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	N	68Zn	252.40	1	106.8	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	75As	50.81	1	106.8	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	78Se	92.58	1	106.8	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	N	82Se	93.78	1	106.8	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	86Sr	357.40	1	106.8	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	N	88Sr	350.10	1	106.8	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	N	97Mo	106.60	1	105.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	98Mo	105.70	1	105.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	N	107Ag	25.38	1	105.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	109Ag	25.23	1	105.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	N	111Cd	20.51	1	105.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	114Cd	20.57	1	105.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	118Sn	256.70	1	103.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	N	120Sn	257.10	1	103.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	N	121Sb	51.27	1	103.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	123Sb	51.58	1	103.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	N	135Ba	132.20	1	103.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	137Ba	130.10	1	103.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	N	203Tl	9.90	1	105.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	205Tl	10.08	1	105.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007S	Y	208Pb	24.55	1	105.2	3/28/2014	14:28	MS	JQ1402258-03	6020 D	
J1402025-007SD	Y	9Be	23.45	1	106	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	27Al	2516.00	1	106	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	47Ti	254.70	1	106	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	N	48Ti	288.70	1	106	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	51V	100.80	1	106	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	52Cr	52.90	1	106	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	55Mn	115.20	1	104.2	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	59Co	52.23	1	104.2	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	60Ni	134.40	1	104.2	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	

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SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402025-007SD	N	62Ni	137.60	1	104.2	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	ICS-A FH,
J1402025-007SD	N	63Cu	51.57	1	104.2	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	65Cu	51.46	1	104.2	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	66Zn	257.20	1	104.2	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	N	68Zn	255.40	1	104.2	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	75As	51.43	1	104.2	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	78Se	94.38	1	104.2	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	N	82Se	94.33	1	104.2	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	86Sr	365.40	1	104.2	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	N	88Sr	357.40	1	104.2	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	N	97Mo	108.30	1	104.1	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	98Mo	105.60	1	104.1	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	N	107Ag	25.71	1	104.1	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	109Ag	25.56	1	104.1	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	N	111Cd	20.91	1	104.1	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	114Cd	20.89	1	104.1	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	118Sn	260.70	1	102.1	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	N	120Sn	260.90	1	102.1	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	N	121Sb	52.11	1	102.1	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	123Sb	52.07	1	102.1	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	N	135Ba	135.60	1	102.1	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	137Ba	134.30	1	102.1	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	N	203Tl	10.06	1	103.5	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	205Tl	10.16	1	103.5	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007SD	Y	208Pb	24.94	1	103.5	3/28/2014	14:33	MSD	JQ1402258-04	6020 D	
J1402025-007L	Y	9Be	0.01	5	107.1	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	27Al	6.13	5	107.1	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	47Ti	0.24	5	107.1	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	N	48Ti	6.47	5	107.1	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	51V	0.23	5	107.1	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	52Cr	-0.29	5	107.1	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	55Mn	2.45	5	105.6	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	59Co	0.03	5	105.6	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	60Ni	6.60	5	105.6	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	N	62Ni	6.11	5	105.6	3/28/2014	14:38	SD	Serial Dilution	6020 D	ICS-A FH,
J1402025-007L	N	63Cu	0.34	5	105.6	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	65Cu	0.32	5	105.6	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	66Zn	2.64	5	105.6	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	N	68Zn	2.93	5	105.6	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	75As	0.06	5	105.6	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	78Se	0.14	5	105.6	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	N	82Se	0.20	5	105.6	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	86Sr	50.93	5	105.6	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	N	88Sr	50.96	5	105.6	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	N	97Mo	0.71	5	102.9	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	98Mo	0.68	5	102.9	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	N	107Ag	-0.04	5	102.9	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	109Ag	-0.03	5	102.9	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	N	111Cd	0.12	5	102.9	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	114Cd	0.15	5	102.9	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	118Sn	1.30	5	102.5	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	N	120Sn	1.20	5	102.5	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	N	121Sb	0.12	5	102.5	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	123Sb	0.13	5	102.5	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	N	135Ba	5.96	5	102.5	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	137Ba	5.86	5	102.5	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	N	203Tl	0.03	5	104	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	205Tl	0.03	5	104	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007L	Y	208Pb	0.04	5	104	3/28/2014	14:38	SD	Serial Dilution	6020 D	
J1402025-007A	Y	9Be	24.00	1	105.7	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	27Al	2510.00	1	105.7	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	47Ti	254.60	1	105.7	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	N	48Ti	288.30	1	105.7	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	51V	100.70	1	105.7	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	52Cr	52.04	1	105.7	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	55Mn	114.10	1	104.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	59Co	51.27	1	104.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	60Ni	131.00	1	104.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	N	62Ni	133.20	1	104.8	3/28/2014	14:43	PS	Post Spike	6020 D	ICS-A FH,
J1402025-007A	N	63Cu	50.92	1	104.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	65Cu	50.45	1	104.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	66Zn	255.10	1	104.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	N	68Zn	251.70	1	104.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	75As	50.66	1	104.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	78Se	97.40	1	104.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	N	82Se	98.31	1	104.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	86Sr	352.10	1	104.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	N	88Sr	345.60	1	104.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	N	97Mo	106.10	1	101.9	3/28/2014	14:43	PS	Post Spike	6020 D	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402025-007A	Y	**98Mo**	105.40	1	101.9	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	N	107Ag	25.43	1	101.9	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	**109Ag**	25.37	1	101.9	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	N	111Cd	20.44	1	101.9	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	**114Cd**	21.20	1	101.9	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	**118Sn**	257.00	1	100.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	N	120Sn	259.00	1	100.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	N	121Sb	51.10	1	100.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	**123Sb**	51.04	1	100.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	N	135Ba	134.00	1	100.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	**137Ba**	131.70	1	100.8	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	N	203Tl	10.31	1	102.7	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	**205Tl**	10.30	1	102.7	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402025-007A	Y	**208Pb**	24.83	1	102.7	3/28/2014	14:43	PS	Post Spike	6020 D	
J1402076-001	Y	**9Be**	0.00	1	103.7	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**27Al**	5.77	1	103.7	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**47Ti**	0.83	1	103.7	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	N	48Ti	29.39	1	103.7	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**51V**	2.93	1	103.7	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**52Cr**	-0.26	1	103.7	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**55Mn**	0.67	1	99.4	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**59Co**	0.09	1	99.4	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**60Ni**	1.20	1	99.4	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	N	62Ni	0.67	1	99.4	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	ICS-A FH.
J1402076-001	N	63Cu	0.55	1	99.4	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**65Cu**	0.35	1	99.4	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**66Zn**	4.04	1	99.4	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	N	68Zn	4.71	1	99.4	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**75As**	2.31	1	99.4	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**78Se**	0.42	1	99.4	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	N	82Se	0.62	1	99.4	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**86Sr**	223.50	1	99.4	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	N	88Sr	222.20	1	99.4	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	N	97Mo	22.40	1	98.5	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**98Mo**	22.11	1	98.5	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	N	107Ag	-0.05	1	98.5	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**109Ag**	-0.04	1	98.5	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	N	111Cd	0.03	1	98.5	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**114Cd**	0.02	1	98.5	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**118Sn**	1.12	1	98.3	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	N	120Sn	1.14	1	98.3	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	N	121Sb	0.19	1	98.3	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**123Sb**	0.20	1	98.3	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	N	135Ba	11.07	1	98.3	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**137Ba**	11.04	1	98.3	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	N	203Tl	-0.01	1	101.3	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**205Tl**	-0.01	1	101.3	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-001	Y	**208Pb**	0.02	1	101.3	3/28/2014	14:48	SAMP	J1402076-001	200.8 D	
J1402076-002	Y	**9Be**	0.01	1	103.8	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**27Al**	3.44	1	103.8	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**47Ti**	0.56	1	103.8	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	N	48Ti	41.27	1	103.8	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**51V**	0.33	1	103.8	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**52Cr**	-0.40	1	103.8	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**55Mn**	0.21	1	100.7	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**59Co**	0.07	1	100.7	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**60Ni**	0.67	1	100.7	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	N	62Ni	-0.18	1	100.7	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	ICS-A FH.
J1402076-002	N	63Cu	0.72	1	100.7	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**65Cu**	0.70	1	100.7	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**66Zn**	3.79	1	100.7	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	N	68Zn	5.26	1	100.7	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**75As**	0.44	1	100.7	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**78Se**	-0.18	1	100.7	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	N	82Se	0.20	1	100.7	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**86Sr**	776.40	1	100.7	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	N	88Sr	754.30	1	100.7	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	N	97Mo	2.86	1	98.8	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**98Mo**	2.77	1	98.8	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	N	107Ag	-0.06	1	98.8	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**109Ag**	-0.05	1	98.8	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	N	111Cd	0.04	1	98.8	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**114Cd**	0.04	1	98.8	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**118Sn**	0.45	1	100.9	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	N	120Sn	0.38	1	100.9	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	N	121Sb	0.05	1	100.9	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**123Sb**	0.08	1	100.9	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	N	135Ba	26.34	1	100.9	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**137Ba**	26.54	1	100.9	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
J1402076-002	N	203Tl	-0.02	1	104.1	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**205Tl**	-0.02	1	104.1	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
J1402076-002	Y	**208Pb**	0.04	1	104.1	3/28/2014	14:53	SAMP	J1402076-002	200.8 D	
MB-02293-02 10x	Y	**9Be**	0.01	10	106.5	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**27Al**	1.77	10	106.5	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**47Ti**	0.12	10	106.5	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	N	48Ti	0.09	10	106.5	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**51V**	-0.37	10	106.5	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**52Cr**	-0.02	10	106.5	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**55Mn**	0.11	10	103.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**59Co**	0.00	10	103.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**60Ni**	0.05	10	103.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	N	62Ni	-0.72	10	103.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	ICS-A FH,
MB-02293-02 10x	N	63Cu	0.13	10	103.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**65Cu**	0.09	10	103.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**66Zn**	0.97	10	103.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	N	68Zn	1.01	10	103.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**75As**	0.62	10	103.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**78Se**	0.14	10	103.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	N	82Se	0.25	10	103.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**86Sr**	0.07	10	103.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	N	88Sr	0.04	10	103.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	N	97Mo	0.15	10	101.9	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**98Mo**	0.18	10	101.9	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	N	107Ag	0.01	10	101.9	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**109Ag**	0.04	10	101.9	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	N	111Cd	0.01	10	101.9	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**114Cd**	0.01	10	101.9	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**118Sn**	3.53	10	100.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	N	120Sn	3.47	10	100.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	N	121Sb	0.07	10	100.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**123Sb**	0.07	10	100.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	N	135Ba	0.10	10	100.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**137Ba**	0.07	10	100.4	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	N	203Tl	-0.02	10	104	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**205Tl**	-0.02	10	104	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
MB-02293-02 10x	Y	**208Pb**	0.02	10	104	3/28/2014	14:58	MBLK	JQ1402293-02	6020 S	
CCV-2	Y	**9Be**	25.54	1	102.9	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**27Al**	2547.00	1	102.9	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**47Ti**	255.00	1	102.9	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	48Ti	255.90	1	102.9	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**51V**	101.30	1	102.9	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**52Cr**	50.82	1	102.9	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**55Mn**	101.60	1	105.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**59Co**	50.69	1	105.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**60Ni**	98.76	1	105.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	N	62Ni	102.70	1	105.4	3/28/2014	15:03	CCV	CCV	N/A	ICS-A FH,
CCV-2	Y	63Cu	50.61	1	105.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**65Cu**	50.32	1	105.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**66Zn**	257.90	1	105.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	68Zn	255.30	1	105.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**75As**	49.96	1	105.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**78Se**	101.20	1	105.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	82Se	100.90	1	105.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**86Sr**	101.40	1	105.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	88Sr	99.08	1	105.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	97Mo	102.10	1	102.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**98Mo**	100.70	1	102.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	107Ag	25.50	1	102.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**109Ag**	25.66	1	102.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	111Cd	20.11	1	102.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**114Cd**	20.80	1	102.4	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**118Sn**	253.60	1	101.5	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	120Sn	254.10	1	101.5	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	121Sb	50.37	1	101.5	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**123Sb**	51.46	1	101.5	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	135Ba	105.10	1	101.5	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	137Ba	102.60	1	101.5	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	203Tl	10.42	1	104.3	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**205Tl**	10.30	1	104.3	3/28/2014	15:03	CCV	CCV	N/A	
CCV-2	Y	**208Pb**	25.26	1	104.3	3/28/2014	15:03	CCV	CCV	N/A	
CCB-2	Y	**9Be**	0.00	1	101.1	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	**27Al**	0.16	1	101.1	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	47Ti	0.04	1	101.1	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	48Ti	0.11	1	101.1	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	**51V**	0.26	1	101.1	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	**52Cr**	-0.24	1	101.1	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	**55Mn**	0.01	1	101.4	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	**59Co**	0.00	1	101.4	3/28/2014	15:08	CCB	CCB	N/A	

SAMPLE ID	RPT	Anal	Conc (ug/L)	DF	IS Rec (%)	AnalDate	AnalTime	Samp Type	LIMS ID	Method	Comments
CCB-2	Y	60Ni	-0.01	1	101.4	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	N	62Ni	-0.66	1	101.4	3/28/2014	15:08	CCB	CCB	N/A	ICS-A FH,
CCB-2	Y	63Cu	-0.03	1	101.4	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	65Cu	-0.03	1	101.4	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	66Zn	0.05	1	101.4	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	68Zn	0.03	1	101.4	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	75As	0.23	1	101.4	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	78Se	0.09	1	101.4	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	82Se	0.19	1	101.4	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	86Sr	0.00	1	101.4	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	88Sr	0.02	1	101.4	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	97Mo	0.32	1	98.8	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	98Mo	0.35	1	98.8	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	107Ag	-0.06	1	98.8	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	109Ag	-0.05	1	98.8	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	111Cd	0.00	1	98.8	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	114Cd	0.02	1	98.8	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	118Sn	1.12	1	98.3	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	120Sn	1.19	1	98.3	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	121Sb	0.07	1	98.3	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	123Sb	0.11	1	98.3	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	135Ba	0.04	1	98.3	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	137Ba	0.00	1	98.3	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	203Tl	0.02	1	100.4	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	205Tl	0.00	1	100.4	3/28/2014	15:08	CCB	CCB	N/A	
CCB-2	Y	208Pb	0.00	1	100.4	3/28/2014	15:08	CCB	CCB	N/A	
LCS-02293-01 10x	Y	9Be	19.41	10	103.2	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	27Al	530.90	10	103.2	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	47Ti	264.10	10	103.2	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	N	48Ti	266.00	10	103.2	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	51V	104.90	10	103.2	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	52Cr	54.28	10	103.2	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	55Mn	53.42	10	104.6	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	59Co	53.10	10	104.6	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	60Ni	51.21	10	104.6	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	N	62Ni	52.01	10	104.6	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	ICS-A FH,
LCS-02293-01 10x	N	63Cu	52.52	10	104.6	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	65Cu	52.82	10	104.6	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	66Zn	98.66	10	104.6	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	N	68Zn	97.65	10	104.6	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	75As	49.44	10	104.6	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	78Se	45.21	10	104.6	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	N	82Se	46.13	10	104.6	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	86Sr	51.95	10	104.6	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	N	88Sr	51.85	10	104.6	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	N	97Mo	54.18	10	100.7	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	98Mo	53.03	10	100.7	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	N	107Ag	53.96	10	100.7	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	109Ag	52.81	10	100.7	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	N	111Cd	25.11	10	100.7	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	114Cd	25.20	10	100.7	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	118Sn	217.40	10	100.4	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	N	120Sn	216.10	10	100.4	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	N	121Sb	51.13	10	100.4	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	123Sb	51.55	10	100.4	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	N	135Ba	54.07	10	100.4	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	137Ba	53.04	10	100.4	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	N	203Tl	51.62	10	102	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	205Tl	52.29	10	102	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
LCS-02293-01 10x	Y	208Pb	51.52	10	102	3/28/2014	15:13	LCS	JQ1402293-01	6020 S	
J1402083-001 10x	Y	9Be	0.01	10	102.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	Y	27Al	679.70	10	102.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	Y	47Ti	9.57	10	102.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	N	48Ti	10.33	10	102.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	Y	51V	1.11	10	102.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	Y	52Cr	5.16	10	102.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	Y	55Mn	86.12	10	103.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	Y	59Co	0.37	10	103.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	Y	60Ni	2.54	10	103.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	N	62Ni	2.11	10	103.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	ICS-A FH,
J1402083-001 10x	N	63Cu	5.38	10	103.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	Y	65Cu	5.35	10	103.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	Y	66Zn	24.53	10	103.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	N	68Zn	25.62	10	103.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	Y	75As	0.05	10	103.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	Y	78Se	-0.17	10	103.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	N	82Se	0.06	10	103.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	Y	86Sr	18.46	10	103.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	
J1402083-001 10x	N	88Sr	18.54	10	103.4	3/28/2014	15:18	SAMP	J1402083-001	6020 S	

Inorganic Analysis:

Metals

Validation Package

Sample Prep and Ancillary Data

① 384956

Preparation Information Benchsheet

Prep Run: 204596 **Prep Workflow:** MetDigAqMS **Status:** Prepped **Prep Date:** 03/21/2014 09:29
Team: Metals **Prep Method:** EPA 3005A **Current Step:** Digestion **Due Date:** 03/29/2014
Analyst: JPAULEY **Rush/NPDES:** NPDES **Hold Date:** 09/14/2014

Lab Code	Client ID	Bottle #	Initial Amt	Final Volume	Spike Amt	Spike ID	Analytical Method	TestNo List	Comments
JQ1402134-04	Method Blank		50 mL	50 mL			200.8,6020	As T, Be T, Cd T, Cr T, Cr T, Cu T, Mn T, Mo T, Ni T, Pb T, Pb T, Sb T, Se T, Tl T, Zn T	
JQ1402134-03	Lab Control Sample		50 mL	50 mL	0.25 mL 0.25 mL	55300 55301	200.8,6020	As T, Be T, Cd T, Cr T, Cr T, Cu T, Mn T, Mo T, Ni T, Pb T, Pb T, Sb T, Se T, Tl T, Zn T	
J1402003-001	OW-5	.02	50 mL	50 mL			200.8	Cd T, Cr T, Cu T, Ni T, Pb T, Zn T	
J1402003-002	OW-6	.02	50 mL	50 mL			200.8	Cd T, Cr T, Cu T, Ni T, Pb T, Zn T	
J1402003-003	OW-7	.02	50 mL	50 mL			200.8	Cd T, Cr T, Cu T, Ni T, Pb T, Zn T	
J1402003-004	OW-8	.02	50 mL	50 mL			200.8	Cd T, Cr T, Cu T, Ni T, Pb T, Zn T	
J1402025-001	GAIN-M-25A-031814	.03	50 mL	50 mL			6020	As T, Be T, Cd T, Cr T, Mn T, Mo T, Pb T, Sb T, Se T, Tl T	Tier IV
J1402025-002	GAIN-M-36B-031814	.03	50 mL	50 mL			6020	As T, Be T, Cd T, Cr T, Mn T, Mo T, Pb T, Sb T, Se T, Tl T	Tier IV
J1402025-003	GAIN-HG-24S-031814	.03	50 mL	50 mL			6020	As T, Be T, Cd T, Cr T, Mn T, Mo T, Pb T, Sb T, Se T, Tl T	Tier IV
J1402025-004	GAIN-M-25B-031814	.03	50 mL	50 mL			6020	As T, Be T, Cd T, Cr T, Mn T, Mo T, Pb T, Sb T, Se T, Tl T	Tier IV
J1402025-005	GAIN-HG-33S-031914	.03	50 mL	50 mL			6020	As T, Be T, Cd T, Cr T, Mn T, Mo T, Pb T, Sb T, Se T, Tl T	Tier IV
J1402025-006	GAIN-HG-34S-031914	.03	50 mL	50 mL			6020	As T, Be T, Cd T, Cr T, Mn T, Mo T, Pb T, Sb T, Se T, Tl T	Tier IV
J1402025-007	GAIN-HG-22D-031914	.03	50 mL	50 mL			6020	As T, Be T, Cd T, Cr T, Mn T, Mo T, Pb T, Sb T, Se T, Tl T	Tier IV
J1402026-001	MW-46	.04	50 mL	50 mL			6020	As T	
J1402026-001: JQ1402134-01	Matrix Spike	.04	50 mL	50 mL	0.25 mL 0.25 mL	55300 55301	6020	As T	Client requested QC
J1402026-001: JQ1402134-02	Duplicate Matrix Spike	.04	50 mL	50 mL	0.25 mL 0.25 mL	55300 55301	6020	As T	Client requested QC
J1402026-002	DUP-1	.05	50 mL	50 mL			6020	As T	
J1402026-003	MW-6	.05	50 mL	50 mL			6020	As T	
J1402026-004	MW-41	.05	50 mL	50 mL			6020	As T	
J1402026-005	MW-42	.05	50 mL	50 mL			6020	As T	
J1402026-006	MW-1	.05	50 mL	50 mL			6020	As T	
J1402037-001	OBDF-14078-MW-02	.01	50 mL	50 mL			6020	As T, Cd T, Cr T, Pb T	

J1402037-002	OBDF-14078-MW-03	.01	50 mL	50 mL			6020	As T, Cd T, Cr T, Pb T	
J1402037-003	OBDF-14078-MW-04	.01	50 mL	50 mL			6020	As T, Cd T, Cr T, Pb T	

24 Total Samples consisting of 20 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Witness:

Name	Type	ID	Expires	Name	Type	ID	Expires
ICPMS Stock Solution A	Spike	55300	4/1/2014	ICPMS Stock Solution B	Spike	55301	4/1/2014

Preparation Materials

Step	Name	ID	Step	Name	ID
Digestion	50mL Digestion Tube	67095	Digestion	Hydrochloric Acid (HCl) Reagent Grade	67600
Digestion	Nitric Acid Reagent Grade HNO3	67599			

Preparation Hardware / Equipment

Step	Name	Property	Value		Step	Name	Property	Value	
Digestion	J-BlockDigester-06				Digestion	J-Thermometer-04	Temperature	94	deg C

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion	21-MAR-14 09:29	21-MAR-14 14:32	JPAULEY		N	

Comments

Review

Reviewed by: SRO Date: 3/26/14

Chain of Custody

Relinquished By: ______ Date: ______

Received By: ______ Date: ______

Extracts/Digestions Examined

Yes No

Preparation Information Benchsheet

Prep Run: 204592 **Prep Workflow**: MetDigAqICP **Status**: Prepped **Prep Date**: 03/21/2014 08:46
Team: Metals **Prep Method**: EPA 3005A **Current Step**: Digestion **Due Date**: 03/25/2014
Analyst: JPAULEY **Rush/NPDES**: NPDES **Hold Date**: 09/14/2014

Lab Code	Client ID	Bottle #	Initial Amt	Final Volume	Spike Amt	Spike ID	Analytical Method	TestNo List	Comments
JQ1402131-02	Method Blank		50 mL	50 mL			200.7,6010B	Al T, As T, Ca T, Fe T, Fe T, Li T, Mg T, Na T, V T, Zn T	
JQ1402131-01	Lab Control Sample		50 mL	50 mL	0.25 mL 0.25 mL	62628 62629	200.7,6010B	Al T, As T, Ca T, Fe T, Fe T, Li T, Mg T, Na T, V T, Zn T	
J1402002-001	DSN-001A	.04	50 mL	50 mL			200.7	Zn T	
J1402003-001	OW-5	.02	50 mL	50 mL			200.7	Ca T, Mg T	
J1402003-002	OW-6	.02	50 mL	50 mL			200.7	Ca T, Mg T	
J1402003-003	OW-7	.02	50 mL	50 mL			200.7	Ca T, Mg T	
J1402003-004	OW-8	.02	50 mL	50 mL			200.7	Ca T, Mg T	
J1402005-001	Effluent	.03	50 mL	50 mL			200.7	Fe T	
J1402005-004	Influent	.03	50 mL	50 mL			200.7	Fe T	
J1402022-001	MW-15S	.01	50 mL	50 mL			6010B	As T	
J1402022-002	MW-13SR	.01	50 mL	50 mL			6010B	V T	
J1402022-003	DUP1	.01	50 mL	50 mL			6010B	As T	
J1402022-004	DUP2	.01	50 mL	50 mL			6010B	V T	
J1402022-005	EQB	.01	50 mL	50 mL			6010B	As T, V T	
J1402025-001	GAIN-M-25A-031814	.03	50 mL	50 mL			6010B	Al T, Fe T, Li T, Na T	Tier IV
J1402025-002	GAIN-M-36B-031814	.03	50 mL	50 mL			6010B	Al T, Fe T, Li T, Na T	Tier IV
J1402025-003	GAIN-HG-24S-031814	.03	50 mL	50 mL			6010B	Al T, Fe T, Li T, Na T	Tier IV
J1402025-004	GAIN-M-25B-031814	.03	50 mL	50 mL			6010B	Al T, Fe T, Li T, Na T	Tier IV
J1402025-005	GAIN-HG-33S-031914	.03	50 mL	50 mL			6010B	Al T, Fe T, Li T, Na T	Tier IV
J1402025-006	GAIN-HG-34S-031914	.03	50 mL	50 mL			6010B	Al T, Fe T, Li T, Na T	Tier IV
J1402025-007	GAIN-HG-22D-031914	.03	50 mL	50 mL			6010B	Al T, Fe T, Li T, Na T	Tier IV
J1402025-007: JQ1402131-03	Matrix Spike	.03	50 mL	50 mL	0.25 mL 0.25 mL	62628 62629	6010B	Al T, Fe T, Li T, Na T	Tier IV
J1402025-007: JQ1402131-04	Duplicate Matrix Spike	.03	50 mL	50 mL	0.25 mL 0.25 mL	62628 62629	6010B	Al T, Fe T, Li T, Na T	Tier IV
J1402037-001	OBDF-14078-MW-02	.01	50 mL	50 mL			6010B	Al T, Fe T, Na T	

24 Total Samples consisting of 20 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions **Witness:**

Name	Type	ID	Expires	Name	Type	ID	Expires
ICP Stock Solution A	Spike	62628	8/19/2014	ICP Stock Solution B	Spike	62629	8/19/2014

Preparation Materials

Step	Name	ID	Step	Name	ID
Digestion	50mL Digestion Tube	67095	Digestion	Hydrochloric Acid (HCl) Reagent Grade	67600
Digestion	Nitric Acid Reagent Grade HNO3	67599			

Preparation Hardware / Equipment

Step	Name	Property	Value		Step	Name	Property	Value	
Digestion	J-BlockDigester-05				Digestion	J-Thermometer-03	Temperature	92	deg C

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion	21-MAR-14 08:46	21-MAR-14 15:20	JPAULEY		N	

Comments

Review

Reviewed by: [signature] Date: 3-24-14

Chain of Custody

Relinquished By:		Date:		Extracts/Digestions Examined
Received By:		Date:		Yes No

443

385022
Run: 20~~4622~~ JP
3/24/14

Preparation Information Benchsheet

Prep Run:	204622	**Prep Workflow:**	HgDigAq	**Status:**	Prepped	**Prep Date:**	03/21/2014 14:21
Team:	Metals	**Prep Method:**	Method	**Current Step:**	Digestion	**Due Date:**	03/21/2014
Analyst:	JPAULEY	**Rush/NPDES:**	Both			**Hold Date:**	04/04/2014

Lab Code	Client ID	Bottle #	Initial Amt	Final Volume	Spike Amt	Spike ID	Analytical Method	TestNo List	Comments
JQ1402159-02	Method Blank		40 mL	40 mL			245.1,7470A	Hg T	
JQ1402159-01	Lab Control Sample		40 mL	40 mL	0.5 mL	68623	245.1,7470A	Hg T	
J1401837-002	14-0263 Unit 1 Supernate Return	.01	40 mL	40 mL			245.1	Hg T	
J1401837-003	14-0264 Unit 2 Supernate Return	.01	40 mL	40 mL			245.1	Hg T	
J1401881-001	14-0250 SBS	.01	0.100 mL	40 mL			245.1	Hg T	Reduced volume due to color change after 15 mins
J1401916-001	GW8871	.03	40 mL	40 mL			7470A	Hg T	
J1402025-001	GAIN-M-25A-031814	.03	40 mL	40 mL			7470A	Hg T	Tier IV
J1402025-002	GAIN-M-36B-031814	.03	40 mL	40 mL			7470A	Hg T	Tier IV
J1402025-003	GAIN-HG-24S-031814	.03	40 mL	40 mL			7470A	Hg T	Tier IV
J1402025-003: JQ1402159-03	Matrix Spike	.03	40 mL	40 mL	0.5 mL	68623	7470A	Hg T	Tier IV
J1402025-003: JQ1402159-04	Duplicate Matrix Spike	.03	40 mL	40 mL	0.5 mL	68623	7470A	Hg T	Tier IV
J1402025-004	GAIN-M-25B-031814	.03	40 mL	40 mL			7470A	Hg T	Tier IV
J1402025-005	GAIN-HG-33S-031914	.03	40 mL	40 mL			7470A	Hg T	Tier IV
J1402025-006	GAIN-HG-34S-031914	.03	40 mL	40 mL			7470A	Hg T	Tier IV
J1402025-007	GAIN-HG-22D-031914	.03	40 mL	40 mL			7470A	Hg T	Tier IV
J1402037-001	OBDF-14078-MW-02	.01	40 mL	40 mL			7470A	Hg T	
J1402066-001	TMW-1	.01	40 mL	40 mL			7470A	Hg T	
J1402066-002	TMW-2	.01	40 mL	40 mL			7470A	Hg T	
J1402066-003	TMW-3	.01	40 mL	40 mL			7470A	Hg T	
J1402066-004	TMW-4	.01	40 mL	40 mL			7470A	Hg T	
J1402066-005	TMW-5	.01	40 mL	40 mL			7470A	Hg T	
J1402066-006	TMW-6	.01	40 mL	40 mL			7470A	Hg T	
J1402066-007	TMW-7	.01	40 mL	40 mL			7470A	Hg T	

J1402066-008	TMW-8	.01	40 mL	40 mL			7470A	Hg T	

24 Total Samples consisting of 20 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Witness:

Name	Type	ID	Expires
Mercury 100 ug/L Hg	Spike	68623	3/27/2014

Preparation Materials

Step	Name	ID	Step	Name	ID
Digestion	Potassium Permanganate RG KMnO4	57124	Digestion	50mL Digestion Tube	67095
Digestion	Hydroxylamine Sulfate 98% Minimum	57241	Digestion	Nitric Acid Reagent Grade HNO3	67599
Digestion	Potassium Persulfate RG K2S2O8	64849	Digestion	Sulfuric Acid Reagent Grade H2SO4	67601

Preparation Hardware / Equipment

Step	Name	Property	Value		Step	Name	Property	Value	
Digestion	J-BlockDigester-01				Digestion	J-Thermometer-55	Temperature	91	deg C

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion	21-MAR-14 14:21	21-MAR-14 16:21	JPAULEY		N	

Comments

Review

Reviewed by: VP Date: 3/25/14

Chain of Custody

Relinquished By: ______________________ Date: ______________

Received By: ______________________ Date: ______________

Extracts/Digestions Examined

Yes No

B 385006

Preparation Information Benchsheet

Prep Run: 204595 **Prep Workflow:** MetDigAqR-MSAA **Status:** Prepped **Prep Date:** 03/21/2014 09:29
Team: Metals **Current Step:** Digestion
Analyst: JPAULEY **Prep Method:** EPA 3005A **Due Date:** 03/29/2014
Rush/NPDES: NPDES **Hold Date:** 09/14/2014

Lab Code	Client ID	Bottle #	Initial Amt	Final Volume	Spike Amt	Spike ID	Analytical Method	TestNo List	Comments
JQ1402133-04	Method Blank	.	50 mL	50 mL			200.8,6020	As D, Be D, Cd D, Cr D, Cr D, Cu D, Mn D, Mo D, Ni D, Pb D, Pb D, Sb D, Se D, Tl D, Zn D	Lab filtered on 3/19
JQ1402133-03	Lab Control Sample		50 mL	50 mL	0.25 mL 0.25 mL	55300 55301	200.8,6020	As D, Be D, Cd D, Cr D, Cr D, Cu D, Mn D, Mo D, Ni D, Pb D, Pb D, Sb D, Se D, Tl D, Zn D	Lab filtered on 3/19
J1402003-001	OW-5	.07	50 mL	50 mL			200.8	Cd D, Cr D, Cu D, Ni D, Pb D, Zn D	
J1402003-002	OW-6	.07	50 mL	50 mL			200.8	Cd D, Cr D, Cu D, Ni D, Pb D, Zn D	
J1402003-003	OW-7	.07	50 mL	50 mL			200.8	Cd D, Cr D, Cu D, Ni D, Pb D, Zn D	
J1402003-004	OW-8	.07	50 mL	50 mL			200.8	Cd D, Cr D, Cu D, Ni D, Pb D, Zn D	
J1402025-001	GAIN-M-25A-031814	.02	50 mL	50 mL			6020	As D, Be D, Cd D, Cr D, Mn D, Mo D, Pb D, Sb D, Se D, Tl D	Tier IV
J1402025-002	GAIN-M-36B-031814	.02	50 mL	50 mL			6020	As D, Be D, Cd D, Cr D, Mn D, Mo D, Pb D, Sb D, Se D, Tl D	Tier IV
J1402025-003	GAIN-HG-24S-031814	.02	50 mL	50 mL			6020	As D, Be D, Cd D, Cr D, Mn D, Mo D, Pb D, Sb D, Se D, Tl D	Tier IV
J1402025-004	GAIN-M-25B-031814	.02	50 mL	50 mL			6020	As D, Be D, Cd D, Cr D, Mn D, Mo D, Pb D, Sb D, Se D, Tl D	Tier IV
J1402025-005	GAIN-HG-33S-031914	.02	50 mL	50 mL			6020	As D, Be D, Cd D, Cr D, Mn D, Mo D, Pb D, Sb D, Se D, Tl D	Tier IV
J1402025-006	GAIN-HG-34S-031914	.02	50 mL	50 mL			6020	As D, Be D, Cd D, Cr D, Mn D, Mo D, Pb D, Sb D, Se D, Tl D	Tier IV
J1402026-001	MW-46	.03	50 mL	50 mL			6020	As D	Lab filtered on 3/19
J1402026-001: JQ1402133-01	Matrix Spike	.03	50 mL	50 mL	0.25 mL 0.25 mL	55300 55301	6020	As D	Lab filtered on 3/19; Client requested QC
J1402026-001: JQ1402133-02	Duplicate Matrix Spike	.03	50 mL	50 mL	0.25 mL 0.25 mL	55300 55301	6020	As D	Lab filtered on 3/19; Client requested QC
J1402026-002	DUP-1	.06	50 mL	50 mL			6020	As D	Lab filtered on 3/19
J1402026-003	MW-6	.06	50 mL	50 mL			6020	As D	Lab filtered on 3/19
J1402026-004	MW-41	.06	50 mL	50 mL			6020	As D	
J1402026-005	MW-42	.06	50 mL	50 mL			6020	As D	Lab filtered on 3/19
J1402026-006	MW-1	.06	50 mL	50 mL			6020	As D	Lab filtered on 3/19

20 Total Samples consisting of 16 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Witness:

Name	Type	ID	Expires	Name	Type	ID	Expires
ICPMS Stock Solution A	Spike	55300	4/1/2014	ICPMS Stock Solution B	Spike	55301	4/1/2014

Preparation Materials

Step	Name	ID	Step	Name	ID
Digestion	Flip Filters for 50mL Tubes 0.45um Dissolved Metal	62380	Digestion	Nitric Acid Reagent Grade HNO3	67599
Digestion	50mL Digestion Tube	67095	Digestion	Hydrochloric Acid (HCl) Reagent Grade	67600

Preparation Hardware / Equipment

Step	Name	Property	Value		Step	Name	Property	Value	
Digestion	J-BlockDigester-06				Digestion	J-Thermometer-04	Temperature	94	deg C

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion	21-MAR-14 09:29	21-MAR-14 14:32	JPAULEY		N	

Comments

Review

Reviewed by: SRO Date: 3/27/14

Chain of Custody

Relinquished By: ______ Date: ______

Received By: ______ Date: ______

Extracts/Digestions Examined

Yes No

385672

Preparation Information Benchsheet

Prep Run: 204900
Team: Metals
Analyst: JPAULEY
Prep Workflow: MetDigAqR-MSAA
Prep Method: EPA 3005A
Rush/NPDES: NPDES
Status: Prepped
Current Step: Digestion
Prep Date: 03/26/2014 10:00
Due Date: 03/31/2014
Hold Date: 09/15/2014

Lab Code	Client ID	Bottle #	Initial Amt	Final Volume	Spike Amt	Spike ID	Analytical Method	TestNo List	Comments
JQ1402258-02	Method Blank		50 mL	50 mL			200.8,6020	As D, Be D, Cd D, Cr D, Mn D, Mo D, Pb D, Sb D, Se D, Tl D	
JQ1402258-01	Lab Control Sample		50 mL	50 mL	0.25 mL 0.25 mL	55300 55301	200.8,6020	As D, Be D, Cd D, Cr D, Mn D, Mo D, Pb D, Sb D, Se D, Tl D	
J1402025-007	GAIN-HG-22D-031914	.02	50 mL	50 mL			6020	As D, Be D, Cd D, Cr D, Mn D, Mo D, Pb D, Sb D, Se D, Tl D	Tier IV*
J1402025-007:JQ1402258-03	Matrix Spike	.02	50 mL	50 mL	0.25 mL 0.25 mL	55300 55301	6020	As D, Be D, Cd D, Cr D, Mn D, Mo D, Pb D, Sb D, Se D, Tl D	
J1402025-007:JQ1402258-04	Duplicate Matrix Spike	.02	50 mL	50 mL	0.25 mL 0.25 mL	55300 55301	6020	As D, Be D, Cd D, Cr D, Mn D, Mo D, Pb D, Sb D, Se D, Tl D	
J1402076-001	25162	.03	50 mL	50 mL			200.8	As D	
J1402076-002	6070300	.03	50 mL	50 mL			200.8	As D	

7 Total Samples consisting of 3 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Witness:

Name	Type	ID	Expires	Name	Type	ID	Expires
ICPMS Stock Solution A	Spike	55300	4/1/2014	ICPMS Stock Solution B	Spike	55301	4/1/2014

Preparation Materials

Step	Name	ID	Step	Name	ID
Digestion	50mL Digestion Tube	67095	Digestion	Hydrochloric Acid (HCl) Reagent Grade	67600
Digestion	Nitric Acid Reagent Grade HNO3	67599			

Preparation Hardware / Equipment

Step	Name	Property	Value		Step	Name	Property	Value	
Digestion	J-BlockDigester-06				Digestion	J-Thermometer-04	Temperature	93	deg C

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion	26-MAR-14 10:00	26-MAR-14 14:58	JPAULEY		N	

Comments

Review

Reviewed by: SRD Date: 3/31/14

Chain of Custody

Relinquished By:	____________	Date:	____________	Extracts/Digestions Examined
				Yes No
Received By:	____________	Date:	____________	

Preparation Information Benchsheet

Prep Run: 204591	**Prep Workflow:** MetDigAqR-ICP	**Status:** Prepped	**Prep Date:** 03/21/2014 08:46
Team: Metals	**Prep Method:** EPA 3005A	**Current Step:** Digestion	**Due Date:** 03/31/2014
Analyst: JPAULEY	**Rush/NPDES:** NPDES		**Hold Date:** 09/14/2014

Lab Code	Client ID	Bottle #	Initial Amt	Final Volume	Spike Amt	Spike ID	Analytical Method	TestNo List	Comments
JQ1402130-02	Method Blank		50 mL	50 mL			6010B	Al D, Fe D, Na D	
JQ1402130-01	Lab Control Sample		50 mL	50 mL	0.25 mL 0.25 mL	62628 62629	6010B	Al D, Fe D, Na D	
J1402025-001	GAIN-M-25A-031814	.02	50 mL	50 mL			6010B	Al D, Fe D, Na D	Tier IV
J1402025-002	GAIN-M-36B-031814	.02	50 mL	50 mL			6010B	Al D, Fe D, Na D	Tier IV
J1402025-002: JQ1402130-03	Matrix Spike	.02	50 mL	50 mL	0.25 mL 0.25 mL	62628 62629	6010B	Al D, Fe D, Na D	Tier IV
J1402025-002: JQ1402130-04	Duplicate Matrix Spike	.02	50 mL	50 mL	0.25 mL 0.25 mL	62628 62629	6010B	Al D, Fe D, Na D	Tier IV
J1402025-003	GAIN-HG-24S-031814	.02	50 mL	50 mL			6010B	Al D, Fe D, Na D	Tier IV
J1402025-004	GAIN-M-25B-031814	.02	50 mL	50 mL			6010B	Al D, Fe D, Na D	Tier IV
J1402025-005	GAIN-HG-33S-031914	.02	50 mL	50 mL			6010B	Al D, Fe D, Na D	Tier IV
J1402025-006	GAIN-HG-34S-031914	.02	50 mL	50 mL			6010B	Al D, Fe D, Na D	Tier IV
J1402025-007	GAIN-HG-22D-031914	.02	50 mL	50 mL			6010B	Al D, Fe D, Na D	Tier IV

11 Total Samples consisting of 7 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Witness:

Name	Type	ID	Expires
ICP Stock Solution A	Spike	62628	8/19/2014
ICP Stock Solution B	Spike	62629	8/19/2014

Preparation Materials

Step	Name	ID
Digestion	50mL Digestion Tube	67095
Digestion	Nitric Acid Reagent Grade HNO3	67599
Digestion	Hydrochloric Acid (HCl) Reagent Grade	67600

Preparation Hardware / Equipment

Step	Name	Property	Value	
Digestion	J-BlockDigester-05			
Digestion	J-Thermometer-03	Temperature	92	deg C

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion	21-MAR-14 08:46	21-MAR-14 15:20	JPAULEY		N	

Comments

Review

Reviewed by: [signature] Date: 3-24-14

Chain of Custody

Relinquished By:		Date:		Extracts/Digestions Examined
				Yes No
Received By:		Date:		

Run: 385020

Preparation Information Benchsheet

Prep Run: 204565 **Prep Workflow**: HgDigAqDiss **Status**: Prepped **Prep Date**: 03/20/2014 18:40
Team: Metals **Prep Method**: Method **Current Step**: Digestion
Analyst: JPAULEY **Rush/NPDES**: NPDES **Due Date**: 03/31/2014
Hold Date: 04/15/2014

Lab Code	Client ID	Bottle #	Initial Amt	Final Volume	Spike Amt	Spike ID	Analytical Method	TestNo List	Comments
JQ1402113-02	Method Blank		40 mL	40 mL			7470A	Hg D	
JQ1402113-01	Lab Control Sample		40 mL	40 mL	0.5 mL	68623	7470A	Hg D	
J1402025-001	GAIN-M-25A-031814	.02	40 mL	40 mL			7470A	Hg D	Tier IV
J1402025-001: JQ1402113-03	Matrix Spike	.02	40 mL	40 mL	0.5 mL	68623	7470A	Hg D	Tier IV
J1402025-001: JQ1402113-04	Duplicate Matrix Spike	.02	40 mL	40 mL	0.5 mL	68623	7470A	Hg D	Tier IV
J1402025-002	GAIN-M-36B-031814	.02	40 mL	40 mL			7470A	Hg D	Tier IV
J1402025-003	GAIN-HG-24S-031814	.02	40 mL	40 mL			7470A	Hg D	Tier IV
J1402025-004	GAIN-M-25B-031814	.02	40 mL	40 mL			7470A	Hg D	Tier IV
J1402025-005	GAIN-HG-33S-031914	.02	40 mL	40 mL			7470A	Hg D	Tier IV
J1402025-006	GAIN-HG-34S-031914	.02	40 mL	40 mL			7470A	Hg D	Tier IV
J1402025-007	GAIN-HG-22D-031914	.02	40 mL	40 mL			7470A	Hg D	Tier IV

11 Total Samples consisting of 7 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Witness:

Name	Type	ID	Expires
Mercury 100 ug/L Hg	Spike	68623	3/27/2014

Preparation Materials

Step	Name	ID
Digestion	Potassium Permanganate RG KMnO4	57124
Digestion	Hydroxylamine Sulfate 98% Minimum	57241
Digestion	Potassium Persulfate RG K2S2O8	64849
Digestion	50mL Digestion Tube	67095
Digestion	Nitric Acid Reagent Grade HNO3	67599
Digestion	Sulfuric Acid Reagent Grade H2SO4	67601

Preparation Hardware / Equipment

Step	Name	Property	Value	
Digestion	J-BlockDigester-02			
Digestion	J-Thermometer-89	Temperature	90	deg C

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion	20-MAR-14 18:40	20-MAR-14 20:40	JPAULEY		N	

Comments

Review

Reviewed by: VB Date: 3/24/14

Chain of Custody

Relinquished By:		Date:		Extracts/Digestions Examined
				Yes No
Received By:		Date:		

Inorganic Analysis:
General Chemistry and Physical Parameters

Validation Package

Sample and QC Results

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Collected: 3/18/14 - 3/19/14
Date Received: 3/19/14

Units: mg/L
Basis: NA

Analysis Method: 300.0

Chloride

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
GAIN-M-25A-031814	J1402025-001	**1.3**		1.0	0.2	1	NA	3/21/14 21:15	
GAIN-M-36B-031814	J1402025-002	**7.8**		1.0	0.2	1	NA	3/21/14 21:31	
GAIN-HG-24S-031814	J1402025-003	**9.1**		1.0	0.2	1	NA	3/21/14 21:47	
GAIN-M-25B-031814	J1402025-004	**26.7**		1.0	0.2	1	NA	3/21/14 22:35	
GAIN-HG-33S-031914	J1402025-005	**7.8**		1.0	0.2	1	NA	3/21/14 22:51	
GAIN-HG-34S-031914	J1402025-006	**28.5**		1.0	0.2	1	NA	3/21/14 23:07	
GAIN-HG-22D-031914	J1402025-007	**3.1**		1.0	0.2	1	NA	3/21/14 23:23	
Method Blank	J1402025-MB	ND	U	1.0	0.2	1	NA	3/21/14 13:21	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Collected: 3/18/14 - 3/19/14
Date Received: 3/19/14

Units: ColorUnits
Basis: NA

Analysis Method: SM 2120 B

Color, True

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
GAIN-M-25A-031814	J1402025-001	ND	U	5.0	5.0	1	NA	3/19/14 18:15	
GAIN-M-36B-031814	J1402025-002	**10.0**		5.0	5.0	1	NA	3/19/14 18:19	
GAIN-HG-24S-031814	J1402025-003	ND	U	5.0	5.0	1	NA	3/19/14 18:20	
GAIN-M-25B-031814	J1402025-004	**10.0**		5.0	5.0	1	NA	3/19/14 18:27	
GAIN-HG-33S-031914	J1402025-005	**5.0**		5.0	5.0	1	NA	3/19/14 18:30	
GAIN-HG-34S-031914	J1402025-006	**5.0**		5.0	5.0	1	NA	3/19/14 18:32	
GAIN-HG-22D-031914	J1402025-007	**30.0**		5.0	5.0	1	NA	3/19/14 18:34	
Method Blank	J1402025-MB	ND	U	5.0	5.0	1	NA	3/19/14 18:08	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Collected: 3/18/14 - 3/19/14
Date Received: 3/19/14

Units: pH Units
Basis: NA

Analysis Method: SM 2120 B

pH of Color Analysis

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
GAIN-M-25A-031814	J1402025-001	6.96		-		1	NA	3/19/14 18:15	
GAIN-M-36B-031814	J1402025-002	7.48		-		1	NA	3/19/14 18:19	
GAIN-HG-24S-031814	J1402025-003	7.27		-		1	NA	3/19/14 18:20	
GAIN-M-25B-031814	J1402025-004	6.41		-		1	NA	3/19/14 18:27	
GAIN-HG-33S-031914	J1402025-005	7.41		-		1	NA	3/19/14 18:30	
GAIN-HG-34S-031914	J1402025-006	9.00		-		1	NA	3/19/14 18:32	
GAIN-HG-22D-031914	J1402025-007	7.17		-		1	NA	3/19/14 18:34	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Collected: 3/18/14 - 3/19/14
Date Received: 3/19/14

Units: mg/L
Basis: NA

Analysis Method: SM 2540 C

Solids, Total Dissolved

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
GAIN-M-25A-031814	J1402025-001	**163**		10	10	1	NA	3/21/14 16:00	
GAIN-M-36B-031814	J1402025-002	**163**		10	10	1	NA	3/21/14 16:00	
GAIN-HG-24S-031814	J1402025-003	**132**		10	10	1	NA	3/21/14 16:00	
GAIN-M-25B-031814	J1402025-004	**196**		10	10	1	NA	3/21/14 16:00	
GAIN-HG-33S-031914	J1402025-005	**162**		10	10	1	NA	3/21/14 16:00	
GAIN-HG-34S-031914	J1402025-006	**119**		10	10	1	NA	3/21/14 16:00	
GAIN-HG-22D-031914	J1402025-007	**154**		10	10	1	NA	3/21/14 16:00	
Method Blank	J1402025-MB	ND	U	10	10	1	NA	3/21/14 16:00	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Collected: 3/18/14 - 3/19/14
Date Received: 3/19/14

Units: pH Units
Basis: NA

Analysis Method: SM 4500-H+ B

pH

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
GAIN-M-25A-031814	J1402025-001	7.45		-		1	NA	3/21/14 21:02	Q
GAIN-M-36B-031814	J1402025-002	7.83		-		1	NA	3/21/14 21:13	Q
GAIN-HG-24S-031814	J1402025-003	7.68		-		1	NA	3/21/14 21:21	Q
GAIN-M-25B-031814	J1402025-004	7.00		-		1	NA	3/21/14 21:30	Q
GAIN-HG-33S-031914	J1402025-005	7.86		-		1	NA	3/21/14 21:38	Q
GAIN-HG-34S-031914	J1402025-006	8.92		-		1	NA	3/21/14 21:46	Q
GAIN-HG-22D-031914	J1402025-007	7.62		-		1	NA	3/21/14 21:55	Q

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Collected: 3/19/14
Date Received: 3/19/14
Date Analyzed: 3/21/14

Matrix Spike Summary
General Chemistry Parameters

Sample Name: GAIN-HG-22D-031914
Lab Code: J1402025-007

Units: mg/L
Basis: NA

Analytical Method: 300.0

GAIN-HG-22D-031914MS
Matrix Spike
J1402025-007MS

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Chloride	3.1	53.5	50.0	101	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Collected: 3/18/14
Date Received: 3/19/14
Date Analyzed: 3/19/14

Replicate Sample Summary
General Chemistry Parameters

Sample Name: GAIN-M-25A-031814
Lab Code: J1402025-001

Units: ColorUnits
Basis: NA

Analyte Name	Method	LOQ	MDL	Sample Result	GAIN-M-25A-031814DUP Duplicate Sample J1402025-001DUP Result	Average	RPD	RPD Limit
Color, True	SM 2120 B	5.0	5.0	ND U	ND U	NC	NC	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Collected: 3/18/14
Date Received: 3/19/14
Date Analyzed: 3/21/14

Replicate Sample Summary
General Chemistry Parameters

Sample Name: GAIN-M-25B-031814
Lab Code: J1402025-004

Units: mg/L
Basis: NA

Analyte Name	Method	LOQ	MDL	Sample Result	GAIN-M-25B-031814DUP Duplicate Sample J1402025-004DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved	SM 2540 C	10	10	196	194	195	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Collected: 3/19/14
Date Received: 3/19/14
Date Analyzed: 3/21/14

Replicate Sample Summary
General Chemistry Parameters

Sample Name: GAIN-HG-22D-031914
Lab Code: J1402025-007

Units: mg/L
Basis: NA

Analyte Name	Method	LOQ	MDL	Sample Result	GAIN-HG-22D-031914DUP Duplicate Sample J1402025-007DUP Result	Average	RPD	RPD Limit
Chloride	300.0	1.0	0.2	3.1	3.0	3.05	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	Beazer East, Inc.	**Service Request:**	J1402025
Project:	Gainesville March 2014 UIC GW Monitoring/OM-0450-14	**Date Collected:**	3/19/14
Sample Matrix:	Water	**Date Received:**	3/19/14
		Date Analyzed:	3/21/14

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	GAIN-HG-22D-031914	**Units:**	pH Units
Lab Code:	J1402025-007	**Basis:**	NA

Analyte Name	Method	LOQ	MDL	Sample Result	GAIN-HG-22D-031914DUP Duplicate Sample J1402025-007DUP Result	Average	RPD	RPD Limit
pH	SM 4500-H+ B	-		7.62	7.62	7.62	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Analyzed: 3/19/14 - 3/21/14

Lab Control Sample Summary
General Chemistry Parameters

Units: ColorUnits
Basis: NA

Lab Control Sample
J1402025-LCS

Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Color, True	SM 2120 B	30.0	25.0	120	80 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client: Beazer East, Inc.
Project: Gainesville March 2014 UIC GW Monitoring/OM-0450-14
Sample Matrix: Water

Service Request: J1402025
Date Analyzed: 3/19/14 - 3/21/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Lab Control Sample
J1402025-LCS

Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	50.1	50.0	100	90 - 110
Solids, Total Dissolved	SM 2540 C	301	300	100	85 - 115

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Inorganic Analysis:
General Chemistry and Physical Parameters

Validation Package

Raw Data

COLOR ANALYSIS BY SM2120B and EPA 110.2

ALS Environmental

Analyst: LFISCHER Date: 3-19-14 LIMS ID: 384507

Calibration Stds Trace # Gen 844-21A Exp: 3/2-24-14

NaOH Trace # NA Exp: NA Color LCS Trace # Gen R6-12C Exp: 5-30-15

H_2SO_4 Trace # NA Exp: NA pH Calibration Book & Page Number 867 pg. 41

Sample ID	Initial pH (Acceptance Range 4-10)	Adjusted pH value (Range 4-10)	Sample Vol Used (mL)	Dilution Factor	Color Reading (CU)	Final Result (CU)	Reading Time	Comments
MB	NA	NA	50	1	0	0	1808	
LCS TV=25CU			50		30	30	1812	120 % Rec : Criteria 80-120% rec.
J1402025-1	6.96		50		0	0	18:15	
1DUP	7.03		50		0	0	18:17	RPD < 1%
2	7.48		50		10	10	18:19	
3	7.27		50		0	0	1820	
4	6.41		50		10	10	18:27	
5	7.41		50		5	5	1830	
6	9.00		50		5	5	1832	
7	7.17		50		30	30	1834	

3-19-14

Reviewed By: 3/20/14

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Columbia Analytical Services
Analytical Run Coversheet

Analyst: ABRATLI Analysis Date: 3/21/2014 Inst ID: J-Titrator-01

Analyses: Cond / pH Method References: Cond: 120.1 / 2510B | pH 150.1 / 4500H$^+$B / 9040

LIMS Analytical Batch Numbers Within This Analysis Run					
384878					

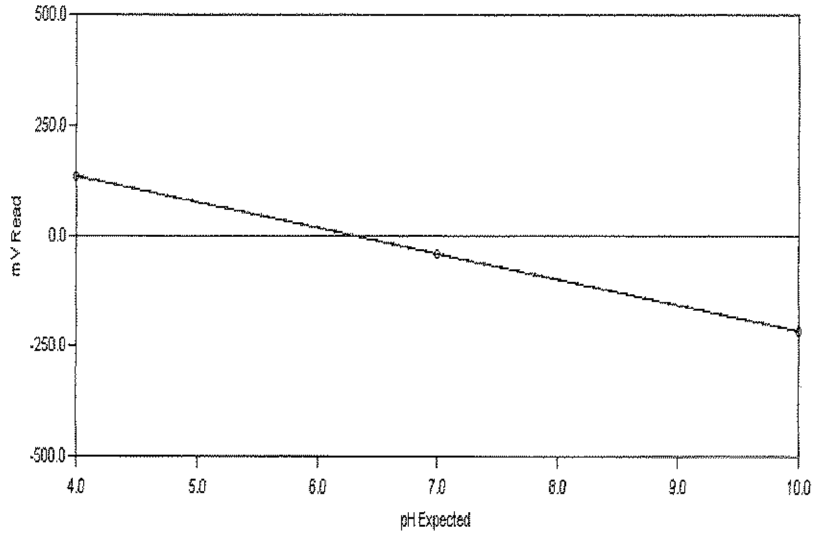
STANDARD TRACABILITY		
Stock Standard	Trace ID	Good Through
pH-~~2~~ 4 Primary	~~EG~~NR5-72D	9/30/14
ASB 3/24/14 pH-7 Primary	R6-23A	8/30/15
pH-~~12.45~~ 10 Primary	R6-11B	9/30/14
pH-7 Secondary	R6-28B	11/30/15
Conductivity Primary (14.9 µmhos/cm)	NA	NA
Conductivity Primary (1412 µmhos/cm)		
Conductivity Primary (12890 µmhos/cm)		
Conductivity Secondary (1000 µmhos/cm)		

Comments

Reviewed By / Date: VR 3/24/14

PC-TitratION PLUS
Calibration Report

Calibration Record # 692



Calibration Settings

Calibration ID	PH CAL 4-7-10	Date	3/21/2014
Channel	1	Time	18:42
Probe Type	pH	Temperature	296.16 K 23.01 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit

Calibration Results

Slope	-58.267	CorrCoeff	1.0000
Intercept	-40.527	Equation:	Y = (-58.267) X + (-40.527)

Calibration Validity **True** Operator ABRATLI

	Result	Minimum	Maximum
Slope	-58.267	-65.00	-53.00
Intercept	-40.527	-100.00	100.00
Correlation Coefficient	1.0000	0.99	1.00

Note: "True" means the calibration was within the specified ranges
"False" means the calibration was NOT within the specified ranges

Calibration Data	Standard	Reading
	4.00	134.15
	7.00	-40.28
	10.00	-215.45

Columbia Analytical Services

Auto Titrator (pH, Conductivity) Data Sheet

Operator: ABRATLI

Sample ID	RPT	Cond (uMho)	pH	Temp (^{o}C)	Vol (mL)	Analysis Date	Analysis Time	QC
prime	Y	802.53	7.96	23.44	15	3/21/2014	18:30:40	
rinse-1	Y	0.17	6.07	24.25	15	3/21/2014	18:36:24	
pH 4 readback	Y		4.01	23.2	15	3/21/2014	18:45:25	
pH 7 readback	Y		7.00	23.09	15	3/21/2014	18:51:04	
pH 10 readback	Y		10.01	23.03	15	3/21/2014	18:56:42	
ICV pH 7	Y		7.00	23.28	15	3/21/2014	19:02:20	
rinse-2	Y	0.37	6.74	23.68	15	3/21/2014	19:10:25	
ccv-250 alk	Y	539.4	10.70	23.65	15	3/21/2014	19:17:35	
ccb-blank	Y	0.79	6.34	23.73	15	3/21/2014	19:22:25	CCB OK

Run Number 1223 **Order Number** 20140321-1

SampleID	Schedule Name	Vial	RunDate	RunTime	Vol (mL)	cond (uS)	pH	palk-mg/L	talk-mg/L	bcarb-mg/L	carb-mg/L	hydr-mg/L	Operator	Temp
~~pH 4 readback~~	~~PH~~	~~3~~	~~3/21/2014~~	~~18:45~~	~~1.00~~	~~-1.00~~	~~4.01~~	~~-1.00~~	~~-1.00~~	~~-1.00~~	~~-1.00~~	~~-1.00~~	~~ABRATLI~~	~~23.20~~
pH 7 readback	PH	4	3/21/2014	18:51	1.00	-1.00	7.00	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	23.09
pH 10 readback	PH	5	3/21/2014	18:56	1.00	-1.00	10.01	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	23.03
ICV pH 7	PH	6	3/21/2014	19:02	1.00	-1.00	7.00	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	23.28
rinse-2	CONDUCTIVITY PH ALKALINITY	7	3/21/2014 ABP 3/24/14	19:10	15.00	.37	6.74	.00	2.72	2.72	.00	.00	ABRATLI	23.68
ccv-250 alk	CONDUCTIVITY PH ALKALINITY	8	3/21/2014	19:17	15.00	539.40	10.70	114.74	227.67	.00	225.86	1.82	ABRATLI	23.65
ccb-blank	CONDUCTIVITY PH ALKALINITY	9	3/21/2014	19:22	15.00	.79	6.34	.00	3.38	3.38	.00	.00	ABRATLI	23.73
~~pH-7 CCV-1~~	~~PH QC FULL~~		~~3/21/2014~~	~~19:31~~	~~1.00~~	~~-1.00~~	~~8.05~~	~~-1.00~~	~~-1.00~~	~~-1.00~~	~~-1.00~~	~~-1.00~~	~~ABRATLI~~	~~23.09~~
pH-7 CCV-1	PH QC		3/21/2014	19:36	1.00	-1.00	7.00	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	23.01
J1401915-001	CONDUCTIVITY-PH	3	3/21/2014	19:40	1.00	332.43	7.99	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	20.15
J1401915-001R	CONDUCTIVITY-PH	3	3/21/2014	19:44	1.00	324.11	8.02	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	20.11
JQ1402169-01 DUP	CONDUCTIVITY-PH	4	3/21/2014	19:48	1.00	326.19	8.01	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	19.88
JQ1402169-01 DUPR 9% RPD	CONDUCTIVITY-PH	4	3/21/2014	19:52	1.00	320.99	8.03	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	20.18
J1401915-002	CONDUCTIVITY-PH	5	3/21/2014	19:56	1.00	326.19	7.94	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	20.20
J1401915-002R	CONDUCTIVITY-PH	5	3/21/2014	20:00	1.00	324.11	7.96	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	20.51
J1401915-003	CONDUCTIVITY-PH	6	3/21/2014	20:05	1.00	327.23	7.97	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	20.59
J1401915-003R	CONDUCTIVITY-PH	6	3/21/2014	20:09	1.00	324.11	7.98	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	21.03
J1401984-001	CONDUCTIVITY-PH	7	3/21/2014	20:13	1.00	330.35	7.96	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	21.16
J1401984-001R	CONDUCTIVITY-PH	7	3/21/2014	20:17	1.00	328.27	7.97	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	21.41
J1401984-002	CONDUCTIVITY-PH	8	3/21/2014	20:21	1.00	329.31	7.94	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	21.21
J1401984-002R	CONDUCTIVITY-PH	8	3/21/2014	20:26	1.00	326.19	7.95	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	21.40
J1401984-003	CONDUCTIVITY-PH	9	3/21/2014	20:30	1.00	326.19	7.92	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	21.11
J1401984-003R	CONDUCTIVITY-PH	9	3/21/2014	20:34	1.00	325.15	7.94	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	21.44
J1402002-001	CONDUCTIVITY-PH	10	3/21/2014	20:38	1.00	2,311.66	8.04	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	21.08
J1402002-001R	CONDUCTIVITY-PH	10	3/21/2014	20:44	1.00	2,311.66	8.05	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	21.40
J1402019-001	CONDUCTIVITY-PH	11	3/21/2014	20:48	1.00	1,704.78	7.40	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	21.37
J1402019-001R	CONDUCTIVITY-PH	11	3/21/2014	20:54	1.00	1,680.10	7.43	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	21.53
J1402025-001	CONDUCTIVITY-PH	12	3/21/2014	20:58	1.00	237.78	7.40	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	21.79
J1402025-001R	CONDUCTIVITY-PH	12	3/21/2014	21:02	1.00	235.70	7.45	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.03
pH-7 CCV-2	PH QC		3/21/2014	21:05	1.00	-1.00	7.00	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.86

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Run Number 1225 **Order Number** 20140321-3

SampleID	Schedule Name	Vial	RunDate	RunTime	Vol (mL)	cond (uS)	pH	palk-mg/L	talk-mg/L	bcarb-mg/L	carb-mg/L	hydr-mg/L	Operator	Temp
J1402025-002	CONDUCTIVITY-PH	14	3/21/2014	21:09	1.00	260.66	7.80	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.54
J1402025-002R	CONDUCTIVITY-PH	14	3/21/2014	21:13	1.00	256.50	7.83	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.67
J1402025-003	CONDUCTIVITY-PH	15	3/21/2014	21:17	1.00	198.68	7.66	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.81
J1402025-003R	CONDUCTIVITY-PH	15	3/21/2014	21:21	1.00	196.49	7.68	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.93
J1402025-004	CONDUCTIVITY-PH	16	3/21/2014	21:26	1.00	314.75	6.98	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.72
J1402025-004R	CONDUCTIVITY-PH	16	3/21/2014	21:30	1.00	313.71	7.00	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.74
J1402025-005	CONDUCTIVITY-PH	17	3/21/2014	21:34	1.00	263.78	7.83	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.60
J1402025-005R	CONDUCTIVITY-PH	17	3/21/2014	21:38	1.00	260.66	7.86	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.66
J1402025-006	CONDUCTIVITY-PH	18	3/21/2014	21:42	1.00	159.05	8.97	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.54
J1402025-006R	CONDUCTIVITY-PH	18	3/21/2014	21:46	1.00	157.70	8.92	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.66
J1402025-007	CONDUCTIVITY-PH	19	3/21/2014	21:50	1.00	231.54	7.60	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.58
J1402025-007R	CONDUCTIVITY-PH	19	3/21/2014	21:55	1.00	228.42	7.62	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.58
JQ1402169-02 DUP	CONDUCTIVITY-PH	20	3/21/2014	21:59	1.00	232.58	7.60	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.74
JQ1402169-02 DUPR <15%RPD	CONDUCTIVITY-PH	20	3/21/2014	22:03	1.00	228.42	7.62	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.78
pH-7 CCV-3	PH QC		3/21/2014	22:05	1.00	-1.00	7.01	-1.00	-1.00	-1.00	-1.00	-1.00	ABRATLI	22.87

Columbia Analytical Services
Analytical Run Coversheet

Analyst: LFISCHER Analysis Date: 3-21-14 LIMS Run ID: 384817

Analysis: Total Dissolved Solids Method References: 160.1 / SM 2540C

EQUIPMENT TRACABILITY			
104°C Oven ID:	H	Balance ID:	6
180°C Oven ID:	D		

REAGENT TRACABILITY

Reagent Name	Trace ID	Good Through
LCS	Gen 844-24A	6-4-14

Comments

Reviewed By / Date: VR 3/24/14

Total Dissolved Solids

Method 160.1/ SM 2540C

Analyst: LFISCHER
Set-up Date: 3/21/14
Set-up Time: 16:00:00

MRL: 10 mg/L
LCV TV: 300 mg/L
LODV TV: 30 mg/L
Default Samp Vol (mL): 100

QC Limits	
LCV TV	85 to 115% Rec
LODV TV	70 to 130% Rec

180°C Oven Dates, Times, and Weights

Date/Time In	Date/Time In	Date/Time In	Date/Time In	Date/Time In	Date/Time In
03/22/14	03/24/14	03/24/14			
9:35	12:27	16:20			
Date/Time Out	Date/Time Out	Date/Time Out	Date/Time Out	Date/Time Out	Date/Time Out
03/24/14	03/24/14	03/24/14			
9:16	13:45	18:00			

SAMPLE ID	DISH ID	Empty Dish Wt (g)	Spec Cond	Samp Vol (mL)	Final Dish + Residue Wt (g)	TDS (mg/L)	DF	QC Comment	Dish + Reside Wt 1 (g)	Dish + Reside Wt 2 (g)	Dish + Reside Wt 3 (g)	Dish + Reside Wt 4 (g)	Dish + Reside Wt 5 (g)	Dish + Reside Wt 6 (g)
MB-384817	PJG	73.4838	1	100	73.4842	4.0	1.0		73.4841	73.4842				
LCS-384817	AMP	85.7755	1	100	**85.8056**	301.0	1.0	100.3% Rec	85.8054	85.8056				
J1401971-001	PIT	88.3193	1573	50	**88.3765**	1144.0	2.0		88.3765	88.3765				
J1401971-002	AXE	74.2931	1792	50	**74.3634**	1406.0	2.0		74.3629	74.3638	74.3634			
J1401971-003	NLO	69.2398	1292	50	**69.2900**	1004.0	2.0		69.2898	69.2900				
J1401984-001	GGK	75.3931	337	100	**75.4158**	227.0	1.0		75.4156	75.4158				
J1401984-002	QRT	67.4679	344	100	**67.4904**	225.0	1.0		67.4900	67.4904				
J1401984-003	AJB	96.2674	337	100	**96.2894**	220.0	1.0		96.2894	96.2894				
J1401999-003	THE	87.8874	3500	25	**87.9509**	2540.0	4.0		87.9508	87.9509				
J1402003-001	LEF	78.8859	26	100	**78.8876**	17.0	1.0		78.8879	78.8876				
J1402003-002	NXS	68.7419	27	100	**68.7440**	21.0	1.0		68.7437	68.7442	68.7440			
J1402003-003	END	97.4091	19	100	**97.4102**	11.0	1.0		97.4100	97.4102				
J1402003-004	URN	92.7745	20	100	**92.7756**	11.0	1.0		92.7751	92.7756	92.7756			
J1402025-001	TOT	73.4211	260	100	**73.4374**	163.0	1.0		73.4375	73.4374				
J1402025-002	SAY	98.7564	290	100	**98.7727**	163.0	1.0		98.7724	98.7727				
J1402025-003	FEL	99.2137	220	100	**99.2269**	132.0	1.0		99.2268	99.2269				
J1402025-004	MUF	101.1087	340	100	**101.1283**	196.0	1.0		101.1274	101.1282	101.1283			
J1402025-004DUP	HER	93.2081	340	100	**93.2275**	194.0	1.0	1.0% RPD	93.2267	93.2272	93.2275			
J1402025-005	ERQ	71.5941	290	100	**71.6103**	162.0	1.0		71.6101	71.6106	71.6103			
J1402025-006	ARG	69.5306	180	100	**69.5425**	119.0	1.0		69.5423	69.5425				
J1402025-007	ZRK	67.5846	260	100	**67.6000**	154.0	1.0		67.6003	67.6000				
J1402035-003	COB	94.6253	3400	25	**94.6889**	2544.0	4.0		94.6893	94.6889				
J1402063-003	MTV	88.4777	3400	25	**88.5393**	2464.0	4.0		88.5395	88.5393				
J1402063-003DUP	GRL	101.3592	3400	25	**101.4206**	2456.0	4.0	0.3% RPD	101.4209	101.4206				

ALS Environmental
Analytical Run Coversheet

Analyst: ASB Analysis Date: 3/21/2014 Inst ID: J-IC-003

Analysis: Ion Chromatography Method References: 300.0 / 9056

LIMS Analytical Batch Numbers Within This Analysis Run					
384756	384759	384761	384763		

STANDARD TRACABILITY

Stock Standard	Working Standards Made	Trace ID	Good Through
	CCV/LCS/Spike	IC03- 91B	4/13/14
	MRL Intermediate	IC03- 90B	4/3/14

REAGENT TRACABILITY

Reagent Name	Trace ID	Good Through
Eluent	IC03- 91E	3/28/14

STANDARD CONCENTRATIONS AND RANGES

Element	MRL	UQL	ICV	CCV	LCS	Bomb LCS	Units
Fluoride	0.2	20	5	5	5	0	mg/L
Chloride	0.5	200	50	50	50	13.38	mg/L
Nitrite	0.2	20	5	5	5	0	mg/L
Bromide	0.2	20	5	5	5	0	mg/L
Nitrate	0.2	20	5	5	5	0	mg/L
OPO4	0.1	5	2.5	2.5	2.5	0	mg/L
Sulfate	0.5	200	50	50	50	321	mg/L

Comments

2054-1 sent for reanalysis - overrange
1994-36 sent for reanalysis - dilution w/a result <MRL.
2053-1 to -3 were run at a dilution due to matrix
interferece (pH).

Reviewed By / Date: VR 3/27/14

IC RUN SEQUENCE

Instrument ID: J-IC-003 Analysis Date: 3/21/2014

INJ #	Sample ID	Analysis Date/Time	File ID	INJ #	Sample ID	Analysis Date/Time	File ID
1	MRL	3/21/14 12:17	y3211217.CHW	51	J1401994-008 5x	3/22/14 3:23	y3220323.CHW
2	CCB	3/21/14 12:49	y3211249.CHW	52	J1401994-009 5x	3/22/14 3:39	y3220339.CHW
3	CCV	3/21/14 13:05	y3211305.CHW	53	J1401994-010 5x	3/22/14 3:55	y3220355.CHW
4	MB-384756	3/21/14 13:21	y3211321.CHW	54	J1401994-011	3/22/14 4:11	y3220411.CHW
5	LCS-384756	3/21/14 13:37	y3211337.CHW	55	CCV	3/22/14 4:27	y3220427.CHW
6	J1402053-001 1000x	3/21/14 13:53	y3211353.CHW	56	CCB	3/22/14 4:43	y3220443.CHW
7	J1402053-002 1000x	3/21/14 14:09	y3211409.CHW	57	J1401994-012	3/22/14 4:59	y3220459.CHW
8	J1402053-003 1000x	3/21/14 14:25	y3211425.CHW	58	J1401994-014	3/22/14 5:15	y3220515.CHW
9	CCV	3/21/14 16:09	y3211609.CHW	59	J1401994-015	3/22/14 5:31	y3220531.CHW
10	CCB	3/21/14 16:25	y3211625.CHW	60	J1401994-016	3/22/14 5:47	y3220547.CHW
11	J1402067-001	3/21/14 16:41	y3211641.CHW	61	J1401994-017 5x	3/22/14 6:03	y3220603.CHW
12	J1402067-001 2x	3/21/14 16:57	y3211657.CHW	62	J1401994-018 5x	3/22/14 6:19	y3220619.CHW
13	J1402067-002	3/21/14 17:13	y3211713.CHW	63	J1401994-019 5x	3/22/14 6:35	y3220635.CHW
14	J1402067-003	3/21/14 17:29	y3211729.CHW	64	J1401994-020	3/22/14 6:51	y3220651.CHW
15	J1402067-005	3/21/14 17:45	y3211745.CHW	65	J1401994-021	3/22/14 7:07	y3220707.CHW
16	J1402067-006	3/21/14 18:02	y3211802.CHW	66	J1401994-022	3/22/14 7:23	y3220723.CHW
17	J1402067-006 2x	3/21/14 18:18	y3211818.CHW	67	CCV	3/22/14 7:39	y3220739.CHW
18	J1402068-001	3/21/14 18:34	y3211834.CHW	68	CCB	3/22/14 7:55	y3220755.CHW
19	CCV	3/21/14 18:50	y3211850.CHW	69	J1401994-022DUP	3/22/14 8:11	y3220811.CHW
20	CCB	3/21/14 19:06	y3211906.CHW	70	J1401994-022MS	3/22/14 8:27	y3220827.CHW
21	J1402053-006	3/21/14 19:22	y3211922.CHW	71	MB-384761	3/22/14 8:43	y3220843.CHW
22	J1402053-007	3/21/14 19:38	y3211938.CHW	72	LCS-384761	3/22/14 8:59	y3220859.CHW
23	J1402054-001	3/21/14 19:54	y3211954.CHW	73	J1401994-023	3/22/14 9:15	y3220915.CHW
24	J1402054-002	3/21/14 20:11	y3212011.CHW	74	J1401994-023DUP	3/22/14 9:31	y3220931.CHW
25	J1402054-003	3/21/14 20:27	y3212027.CHW	75	J1401994-023MS	3/22/14 9:47	y3220947.CHW
26	J1402054-003DUP	3/21/14 20:43	y3212043.CHW	76	J1401994-024	3/22/14 10:02	y3221002.CHW
27	J1402054-003MS	3/21/14 20:59	y3212059.CHW	77	J1401994-026	3/22/14 10:18	y3221018.CHW
28	J1402025-001	3/21/14 21:15	y3212115.CHW	78	J1401994-027 10x	3/22/14 10:34	y3221034.CHW
29	J1402025-002	3/21/14 21:31	y3212131.CHW	79	CCV	3/22/14 10:50	y3221050.CHW
30	J1402025-003	3/21/14 21:47	y3212147.CHW	80	CCB	3/22/14 11:06	y3221106.CHW
31	CCV	3/21/14 22:03	y3212203.CHW	81	J1401994-028	3/22/14 11:22	y3221122.CHW
32	CCB	3/21/14 22:19	y3212219.CHW	82	J1401994-029 5x	3/22/14 11:38	y3221138.CHW
33	J1402025-004	3/21/14 22:35	y3212235.CHW	83	J1401994-030	3/22/14 11:54	y3221154.CHW
34	J1402025-005	3/21/14 22:51	y3212251.CHW	84	J1401994-031	3/22/14 12:10	y3221210.CHW
35	J1402025-006	3/21/14 23:07	y3212307.CHW	85	J1401994-032	3/22/14 12:26	y3221226.CHW
36	J1402025-007	3/21/14 23:23	y3212323.CHW	86	J1401994-033	3/22/14 12:42	y3221242.CHW
37	J1402025-007DUP	3/21/14 23:39	y3212339.CHW	87	J1401994-034 5x	3/22/14 12:58	y3221258.CHW
38	J1402025-007 MS	3/21/14 23:55	y3212355.CHW	88	J1401994-035	3/22/14 13:14	y3221314.CHW
39	MB-384759	3/22/14 0:11	y3220011.CHW	89	J1401994-036 5x	3/22/14 13:30	y3221330.CHW
40	LCS-384759	3/22/14 0:27	y3220027.CHW	90	J1401994-037	3/22/14 13:46	y3221346.CHW
41	J1401994-002	3/22/14 0:43	y3220043.CHW	91	CCV	3/22/14 14:02	y3221402.CHW
42	J1401994-002DUP	3/22/14 0:59	y3220059.CHW	92	CCB	3/22/14 14:18	y3221418.CHW
43	CCV	3/22/14 1:15	y3220115.CHW	93	J1401994-038	3/22/14 14:34	y3221434.CHW
44	CCB	3/22/14 1:31	y3220131.CHW	94	J1401994-039	3/22/14 14:50	y3221450.CHW
45	J1401994-002MS	3/22/14 1:47	y3220147.CHW	95	J1401994-039DUP	3/22/14 15:06	y3221506.CHW
46	J1401994-003 20x	3/22/14 2:03	y3220203.CHW	96	J1401994-039MS	3/22/14 15:22	y3221522.CHW
47	J1401994-004	3/22/14 2:19	y3220219.CHW	97	J1401994-040	3/22/14 15:38	y3221538.CHW
48	J1401994-005	3/22/14 2:35	y3220235.CHW	98	J1401994-041 5x	3/22/14 15:54	y3221554.CHW
49	J1401994-006	3/22/14 2:51	y3220251.CHW	99	MB-384763	3/22/14 16:10	y3221610.CHW
50	J1401994-007	3/22/14 3:07	y3220307.CHW	100	LCS-384763	3/22/14 16:26	y3221626.CHW

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IC RUN SEQUENCE

Instrument ID: J-IC-003 Analysis Date: 3/21/2014

INJ #	Sample ID	Analysis Date/Time	File ID	INJ #	Sample ID	Analysis Date/Time	File ID
101	J1401994-042	3/22/14 16:42	y3221642.CHW				
102	J1401994-042DUP	3/22/14 16:58	y3221658.CHW				
103	CCV	3/22/14 17:14	y3221714.CHW				
104	CCB	3/22/14 17:30	y3221730.CHW				
105	J1401994-042MS	3/22/14 17:46	y3221746.CHW				
106	J1401994-043	3/22/14 18:02	y3221802.CHW				
107	J1401994-044	3/22/14 18:18	y3221818.CHW				
108	J1401994-045	3/22/14 18:34	y3221834.CHW				
109	J1401994-046	3/22/14 18:50	y3221850.CHW				
110	J1401994-047	3/22/14 19:06	y3221906.CHW				
111	J1401994-048	3/22/14 19:22	y3221922.CHW				
112	J1402059-001 2x	3/22/14 19:38	y3221938.CHW				
113	J1402059-002 2x	3/22/14 19:54	y3221954.CHW				
114	J1402059-002DUP 2x	3/22/14 20:10	y3222010.CHW				
115	CCV	3/22/14 20:26	y3222026.CHW				
116	CCB	3/22/14 20:42	y3222042.CHW				
117	J1402059-002MS 2x	3/22/14 20:58	y3222058.CHW				
118	CCV	3/22/14 21:14	y3222114.CHW				
119	CCB	3/22/14 21:30	y3222130.CHW				

VB

REPORTED DATA WITH FAILING CRITERIA

METHOD: 300.0 / 9056

Analysis Start Date: 3/21/2014

Sample ID	Analyte	Failure	Data File

W

IC Data Summary Sheet

- DATA NOT REPORTED

Sample ID	DF	F~ (mg/L)	Cl (mg/L)	NO2 (mg/L)	Br (mg/L)	NO3 (mg/L)	OPO4 (mg/L)	SO4 (mg/L)	F~	Cl	NO2	Br	NO3	OPO4	SO4	Sample Date/Time	File ID
		Analyte Concentrations (RAW)							QC Recoveries								
MRL	1	0.247	0.656	0.249	0.277	0.264	0.155	0.716								3/21/14 12:17	y3211217.CHW
CCB	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/21/14 12:49	y3211249.CHW
CCV	1	5.106	49.968	5.064	5.182	5.307	2.667	49.371	102.1 %	99.9 %	101.3 %	103.6 %	106.1 %	106.7 %	98.7 %	3/21/14 13:05	y3211305.CHW
MB-384756	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/21/14 13:21	y3211321.CHW
LCS-384756	1	5.086	50.127	5.089	5.290	5.346	2.726	49.547	101.7 %	100.3 %	101.8 %	105.8 %	106.9 %	109.0 %	99.1 %	3/21/14 13:37	y3211337.CHW
J1402053-001	1000	0.000	0.323	0.000	0.000	0.000	0.000	6.192								3/21/14 13:53	y3211353.CHW
J1402053-002	1000	0.000	0.000	0.000	0.000	0.000	0.000	2.442								3/21/14 14:09	y3211409.CHW
J1402053-003	1000	0.000	0.319	0.000	0.000	0.000	0.000	26.690								3/21/14 14:25	y3211425.CHW
CCV	1	5.166	50.030	5.083	5.274	5.331	2.729	49.596	103.3 %	100.1 %	101.7 %	105.5 %	106.6 %	109.2 %	99.2 %	3/21/14 16:09	y3211609.CHW
CCB	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/21/14 16:25	y3211625.CHW
J1402067-001	1	0.187	60.996	0.000	0.388	0.231	0.094	21.551								3/21/14 16:41	y3211641.CHW
J1402067-001	2	0.154	30.253	0.000	0.267	0.187	0.000	10.206								3/21/14 16:57	y3211657.CHW
J1402067-002	1	0.140	12.418	0.000	0.676	0.000	0.000	49.946								3/21/14 17:13	y3211713.CHW
J1402067-003	1	0.195	7.758	0.000	0.355	0.000	0.000	66.523								3/21/14 17:29	y3211729.CHW
J1402067-005	1	0.207	2.192	0.000	0.000	0.000	0.000	1.620								3/21/14 17:45	y3211745.CHW
J1402067-006	1	0.218	2.913	0.000	0.000	0.000	0.167	12.855								3/21/14 18:02	y3211802.CHW
J1402067-006	2	0.171	1.501	0.000	0.000	0.000	0.109	5.963								3/21/14 18:18	y3211818.CHW
J1402068-001	1	0.342	8.282	0.000	0.000	0.275	0.663	38.120								3/21/14 18:34	y3211834.CHW
CCV	1	4.951	49.640	5.032	5.166	5.264	2.718	49.003	99.0 %	99.3 %	100.6 %	103.3 %	105.3 %	108.7 %	98.0 %	3/21/14 18:50	y3211850.CHW
CCB	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/21/14 19:06	y3211906.CHW
J1402053-006	1	0.205	9.698	0.000	0.163	0.000	0.000	91.910								3/21/14 19:22	y3211922.CHW
J1402053-007	1	0.189	6.041	0.000	0.000	0.154	0.000	124.409								3/21/14 19:38	y3211938.CHW
J1402054-001	1	0.201	9.658	0.000	0.000	0.978	0.000	OVER								3/21/14 19:54	y3211954.CHW
J1402054-002	1	0.196	19.847	0.000	0.189	1.438	0.113	102.313								3/21/14 20:11	y3212011.CHW
J1402054-003	1	0.156	7.777	0.122	0.000	0.573	0.000	27.194								3/21/14 20:27	y3212027.CHW
J1402054-003DUP	1	0.159	7.756	0.121	0.000	0.560	0.000	27.162	1.9 %	0.3 %	0.8 %	0.0 %	2.3 %	0.0 %	0.1 %	3/21/14 20:43	y3212043.CHW
J1402054-003MS	1	4.958	58.114	5.124	5.299	5.981	2.574	77.006	96.0 %	100.7 %	100.0 %	106.0 %	108.2 %	103.0 %	99.6 %	3/21/14 20:59	y3212059.CHW
J1402025-001	1	0.138	1.258	0.000	0.000	0.000	0.000	4.883								3/21/14 21:15	y3212115.CHW
J1402025-002	1	0.331	7.818	0.000	0.000	0.000	0.000	0.501								3/21/14 21:31	y3212131.CHW
J1402025-003	1	0.506	9.064	0.000	0.153	0.000	0.000	2.314								3/21/14 21:47	y3212147.CHW

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IC Data Summary Sheet

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Sample ID	DF	Analyte Concentrations (RAW) F~ (mg/L)	Cl (mg/L)	NO2 (mg/L)	Br (mg/L)	NO3 (mg/L)	OPO4 (mg/L)	SO4 (mg/L)	QC Recoveries F~	Cl	NO2	Br	NO3	OPO4	SO4	Sample Date/Time	File ID
CCV	1	4.875	49.913	5.060	5.192	5.293	2.569	49.192	97.5 %	99.8 %	101.2 %	103.8 %	105.9 %	102.8 %	98.4 %	3/21/14 22:03	y3212203.CHW
CCB	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/21/14 22:19	y3212219.CHW
J1402025-004	1	0.148	26.695	0.000	0.182	0.000	0.000	15.400								3/21/14 22:35	y3212235.CHW
J1402025-005	1	0.316	7.848	0.000	0.000	0.000	0.000	0.496								3/21/14 22:51	y3212251.CHW
J1402025-006	1	0.567	28.535	0.000	0.000	0.000	0.000	2.379								3/21/14 23:07	y3212307.CHW
J1402025-007	1	0.149	3.050	0.000	0.000	0.000	0.000	1.263								3/21/14 23:23	y3212323.CHW
J1402025-007DUP	1	0.151	3.044	0.000	0.000	0.000	0.000	1.243	1.3 %	0.2 %	0.0 %	0.0 %	0.0 %	0.0 %	1.6 %	3/21/14 23:39	y3212339.CHW
J1402025-007 MS	1	5.068	53.463	5.069	5.101	5.332	2.551	51.083	98.4 %	100.8 %	101.4 %	102.0 %	106.6 %	102.0 %	99.6 %	3/21/14 23:55	y3212355.CHW
MB-384759	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/22/14 0:11	y3220011.CHW
LCS-384759	1	4.965	50.503	5.122	5.247	5.357	2.651	49.845	99.3 %	101.0 %	102.4 %	104.9 %	107.1 %	106.0 %	99.7 %	3/22/14 0:27	y3220027.CHW
J1401994-002	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000								3/22/14 0:43	y3220043.CHW
J1401994-002DUP	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	3/22/14 0:59	y3220059.CHW
CCV	1	5.157	50.568	5.132	5.252	5.360	2.702	49.955	103.1 %	101.1 %	102.6 %	105.0 %	107.2 %	108.1 %	99.9 %	3/22/14 1:15	y3220115.CHW
CCB	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/22/14 1:31	y3220131.CHW
J1401994-002MS	1	5.086	50.142	5.082	5.294	5.333	2.725	49.507	101.7 %	100.3 %	101.6 %	105.9 %	106.7 %	109.0 %	99.0 %	3/22/14 1:47	y3220147.CHW
J1401994-003	20	0.000	101.916	0.000	0.245	0.000	0.000	42.008								3/22/14 2:03	y3220203.CHW
J1401994-004	1	0.150	115.173	0.000	0.178	0.814	0.000	11.166								3/22/14 2:19	y3220219.CHW
J1401994-005	1	0.148	115.332	0.000	0.201	0.850	0.000	11.327								3/22/14 2:35	y3220235.CHW
J1401994-006	1	0.159	3.673	0.000	0.000	0.230	0.000	1.485								3/22/14 2:51	y3220251.CHW
J1401994-007	1	0.136	15.239	0.000	0.000	0.415	0.000	1.894								3/22/14 3:07	y3220307.CHW
J1401994-008	5	0.000	41.228	0.000	0.282	0.415	0.000	25.076								3/22/14 3:23	y3220323.CHW
J1401994-009	5	0.000	66.310	0.000	0.000	0.000	0.000	11.562								3/22/14 3:39	y3220339.CHW
J1401994-010	5	0.000	56.344	0.000	0.000	0.000	0.000	8.269								3/22/14 3:55	y3220355.CHW
J1401994-011	1	0.139	2.088	0.000	0.000	0.223	0.000	2.062								3/22/14 4:11	y3220411.CHW
CCV	1	5.002	50.696	5.139	5.256	5.372	2.740	50.032	100.0 %	101.4 %	102.8 %	105.1 %	107.4 %	109.6 %	100.1 %	3/22/14 4:27	y3220427.CHW
CCB	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/22/14 4:43	y3220443.CHW
J1401994-012	1	0.135	16.220	0.000	0.249	0.432	0.000	0.780								3/22/14 4:59	y3220459.CHW
J1401994-014	1	0.000	47.705	0.000	0.000	0.271	0.000	2.228								3/22/14 5:15	y3220515.CHW
J1401994-015	1	0.145	29.201	0.000	0.212	0.173	0.000	2.107								3/22/14 5:31	y3220531.CHW
J1401994-016	1	0.139	8.681	0.000	0.000	0.259	0.000	8.429								3/22/14 5:47	y3220547.CHW

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Sample ID	DF	Analyte Concentrations (RAW) F~ (mg/L)	Cl (mg/L)	NO2 (mg/L)	Br (mg/L)	NO3 (mg/L)	OPO4 (mg/L)	SO4 (mg/L)	QC Recoveries F~	Cl	NO2	Br	NO3	OPO4	SO4	Sample Date/Time	File ID
J1401994-017	5	0.000	36.486	0.000	0.187	0.188	0.000	4.504								3/22/14 6:03	y3220603.CHW
J1401994-018	5	0.000	41.260	0.000	0.000	0.147	0.000	32.411								3/22/14 6:19	y3220619.CHW
J1401994-019	5	0.148	8.672	0.000	0.000	0.148	0.122	4.616								3/22/14 6:35	y3220635.CHW
J1401994-020	1	0.137	2.280	0.000	0.000	0.310	0.000	1.765								3/22/14 6:51	y3220651.CHW
J1401994-021	1	0.138	2.262	0.000	0.000	0.297	0.000	1.762								3/22/14 7:07	y3220707.CHW
J1401994-022	1	0.000	149.401	0.000	0.418	0.345	0.000	37.207								3/22/14 7:23	y3220723.CHW
CCV	1	4.971	50.747	5.140	5.264	5.382	2.632	50.091	99.4 %	101.5 %	102.8 %	105.3 %	107.6 %	105.3 %	100.2 %	3/22/14 7:39	y3220739.CHW
CCB	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/22/14 7:55	y3220755.CHW
J1401994-022DUP	1	0.000	149.406	0.000	0.419	0.346	0.000	37.255	0.0 %	0.0 %	0.0 %	0.2 %	0.3 %	0.0 %	0.1 %	3/22/14 8:11	y3220811.CHW
J1401994-022MS	1	5.747	198.461	5.846	6.433	6.497	3.002	93.588	114.9 %	98.1 %	116.9 %	120.3 %	123.0 %	120.1 %	112.8 %	3/22/14 8:27	y3220827.CHW
MB-384761	1	0.000	0.323	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/22/14 8:43	y3220843.CHW
LCS-384761	1	4.953	50.736	5.137	5.355	5.399	2.743	50.098	99.1 %	101.5 %	102.7 %	107.1 %	108.0 %	109.7 %	100.2 %	3/22/14 8:59	y3220859.CHW
J1401994-023	1	0.250	73.344	0.000	0.341	0.363	0.720	22.589								3/22/14 9:15	y3220915.CHW
J1401994-023DUP	1	0.251	73.245	0.000	0.331	0.352	0.679	22.605	0.4 %	0.1 %	0.0 %	3.0 %	3.1 %	5.9 %	0.1 %	3/22/14 9:31	y3220931.CHW
J1401994-023MS	1	5.054	120.415	5.112	5.633	5.746	3.305	72.835	96.1 %	94.1 %	102.2 %	105.8 %	107.7 %	103.4 %	100.5 %	3/22/14 9:47	y3220947.CHW
J1401994-024	1	0.249	73.491	0.000	0.341	0.362	0.692	22.757								3/22/14 10:02	y3221002.CHW
J1401994-026	1	0.000	35.408	0.000	0.000	0.236	0.000	0.845								3/22/14 10:18	y3221018.CHW
J1401994-027	10	0.000	155.235	0.000	0.257	0.210	0.000	27.953								3/22/14 10:34	y3221034.CHW
CCV	1	5.102	50.721	5.141	5.277	5.389	2.726	50.102	102.0 %	101.4 %	102.8 %	105.5 %	107.8 %	109.0 %	100.2 %	3/22/14 10:50	y3221050.CHW
CCB	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/22/14 11:06	y3221106.CHW
J1401994-028	1	0.153	112.939	0.000	0.493	0.697	0.000	15.510								3/22/14 11:22	y3221122.CHW
J1401994-029	5	0.000	47.267	0.000	0.240	0.254	0.000	3.845								3/22/14 11:38	y3221138.CHW
J1401994-030	1	0.148	4.209	0.000	0.000	0.263	0.000	8.895								3/22/14 11:54	y3221154.CHW
J1401994-031	1	0.144	116.089	0.000	0.327	0.683	0.000	0.639								3/22/14 12:10	y3221210.CHW
J1401994-032	1	0.146	142.943	0.000	2.299	0.814	0.000	17.755								3/22/14 12:26	y3221226.CHW
J1401994-033	1	0.138	63.687	0.000	0.264	0.594	0.000	5.909								3/22/14 12:42	y3221242.CHW
J1401994-034	5	0.135	98.500	0.000	0.377	0.183	0.000	10.525								3/22/14 12:58	y3221258.CHW
J1401994-035	1	0.140	7.732	0.000	0.000	0.155	0.000	3.687								3/22/14 13:14	y3221314.CHW
J1401994-036	5	0.000	0.000	0.000	0.000	0.000	0.000	0.000								3/22/14 13:30	y3221330.CHW
J1401994-037	1	0.157	13.000	0.000	0.000	0.399	0.000	8.884								3/22/14 13:46	y3221346.CHW

IC Data Summary Sheet

- DATA NOT REPORTED

Sample ID	DF	F- (mg/L)	Cl (mg/L)	NO2 (mg/L)	Br (mg/L)	NO3 (mg/L)	OPO4 (mg/L)	SO4 (mg/L)	F-	Cl	NO2	Br	NO3	OPO4	SO4	Sample Date/Time	File ID
		Analyte Concentrations (RAW)							QC Recoveries								
CCV	1	4.937	50.745	5.143	5.298	5.395	2.577	50.124	98.7 %	101.5 %	102.9 %	106.0 %	107.9 %	103.1 %	100.2 %	3/22/14 14:02	y3221402.CHW
CCB	1	0.000	0.350	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/22/14 14:18	y3221418.CHW
J1401994-038	1	0.157	12.988	0.000	0.000	0.397	0.000	8.882								3/22/14 14:34	y3221434.CHW
J1401994-039	1	0.142	71.271	0.000	0.000	0.407	0.000	39.907								3/22/14 14:50	y3221450.CHW
J1401994-039DUP	1	0.151	71.188	0.000	0.000	0.392	0.000	41.101	6.1 %	0.1 %	0.0 %	0.0 %	3.8 %	0.0 %	2.9 %	3/22/14 15:06	y3221506.CHW
J1401994-039MS	1	5.218	117.893	4.965	5.369	5.744	2.828	89.267	101.5 %	93.2 %	99.3 %	107.4 %	106.7 %	113.1 %	98.7 %	3/22/14 15:22	y3221522.CHW
J1401994-040	1	0.241	24.204	0.000	0.000	0.279	0.112	5.919								3/22/14 15:38	y3221538.CHW
J1401994-041	5	0.137	88.834	0.000	0.344	0.182	0.000	8.764								3/22/14 15:54	y3221554.CHW
MB-384763	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/22/14 16:10	y3221610.CHW
LCS-384763	1	5.020	50.793	5.144	5.290	5.393	2.695	50.141	100.4 %	101.6 %	102.9 %	105.8 %	107.9 %	107.8 %	100.3 %	3/22/14 16:26	y3221626.CHW
J1401994-042	1	0.164	137.243	0.000	0.694	0.231	0.000	126.808								3/22/14 16:42	y3221642.CHW
J1401994-042DUP	1	0.160	137.263	0.000	0.766	0.241	0.000	127.039	2.5 %	0.0 %	0.0 %	9.9 %	4.2 %	0.0 %	0.2 %	3/22/14 16:58	y3221658.CHW
CCV	1	5.008	50.896	5.160	5.307	5.403	2.695	50.227	100.2 %	101.8 %	103.2 %	106.1 %	108.1 %	107.8 %	100.5 %	3/22/14 17:14	y3221714.CHW
CCB	1	0.000	0.320	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/22/14 17:30	y3221730.CHW
J1401994-042MS	1	5.003	180.803	5.080	5.967	5.552	2.677	169.863	96.8 %	87.1 %	101.6 %	105.5 %	106.4 %	107.1 %	86.1 %	3/22/14 17:46	y3221746.CHW
J1401994-043	1	0.141	3.311	0.000	0.000	0.146	0.000	2.218								3/22/14 18:02	y3221802.CHW
J1401994-044	1	0.136	1.730	0.000	0.000	0.154	0.000	1.144								3/22/14 18:18	y3221818.CHW
J1401994-045	1	0.137	18.237	0.000	0.170	0.728	0.000	9.820								3/22/14 18:34	y3221834.CHW
J1401994-046	1	0.135	2.756	0.000	0.000	0.303	0.000	0.949								3/22/14 18:50	y3221850.CHW
J1401994-047	1	0.135	2.733	0.000	0.000	0.295	0.000	0.939								3/22/14 19:06	y3221906.CHW
J1401994-048	1	0.155	10.840	0.000	0.000	0.212	0.000	4.309								3/22/14 19:22	y3221922.CHW
J1402059-001	2	0.144	65.893	0.000	0.453	0.000	0.000	117.697								3/22/14 19:38	y3221938.CHW
J1402059-002	2	0.148	67.792	0.000	0.443	0.000	0.000	109.554								3/22/14 19:54	y3221954.CHW
J1402059-002DUP	2	0.146	67.827	0.000	0.495	0.000	0.000	109.806	1.4 %	0.1 %	0.0 %	11.1 %	0.0 %	0.0 %	0.2 %	3/22/14 20:10	y3222010.CHW
CCV	1	4.991	51.057	5.169	5.327	5.420	2.678	50.362	99.8 %	102.1 %	103.4 %	106.5 %	108.4 %	107.1 %	100.7 %	3/22/14 20:26	y3222026.CHW
CCB	1	0.000	0.316	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/22/14 20:42	y3222042.CHW
J1402059-002MS	2	5.035	115.743	5.129	5.723	5.404	2.569	154.566	97.7 %	95.9 %	102.6 %	105.6 %	108.1 %	102.8 %	90.0 %	3/22/14 20:58	y3222058.CHW
CCV	1	5.000	50.969	5.173	5.339	5.418	2.747	50.367	100.0 %	101.9 %	103.5 %	106.8 %	108.4 %	109.9 %	100.7 %	3/22/14 21:14	y3222114.CHW
CCB	1	0.000	0.316	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	3/22/14 21:30	y3222130.CHW

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Report date:        3/25/2014 12:13:49
Printed by:         Alexandra Jangrell-B

Ident:              MRL
Analysis from:      3/21/2014 12:17:28
File:               y3211217.CHW             Last save: 3/25/2014 12:13:49

Method:             131210Cal.mtw             Last save: 3/16/2014 17:33:11
Run operator:       Alexandra Jangrell-B
Analysis number:    87582

Dilution:             1
LIMS ID:
Vial number:        1
Volume:             1.0 µL
Amount:             1.0000
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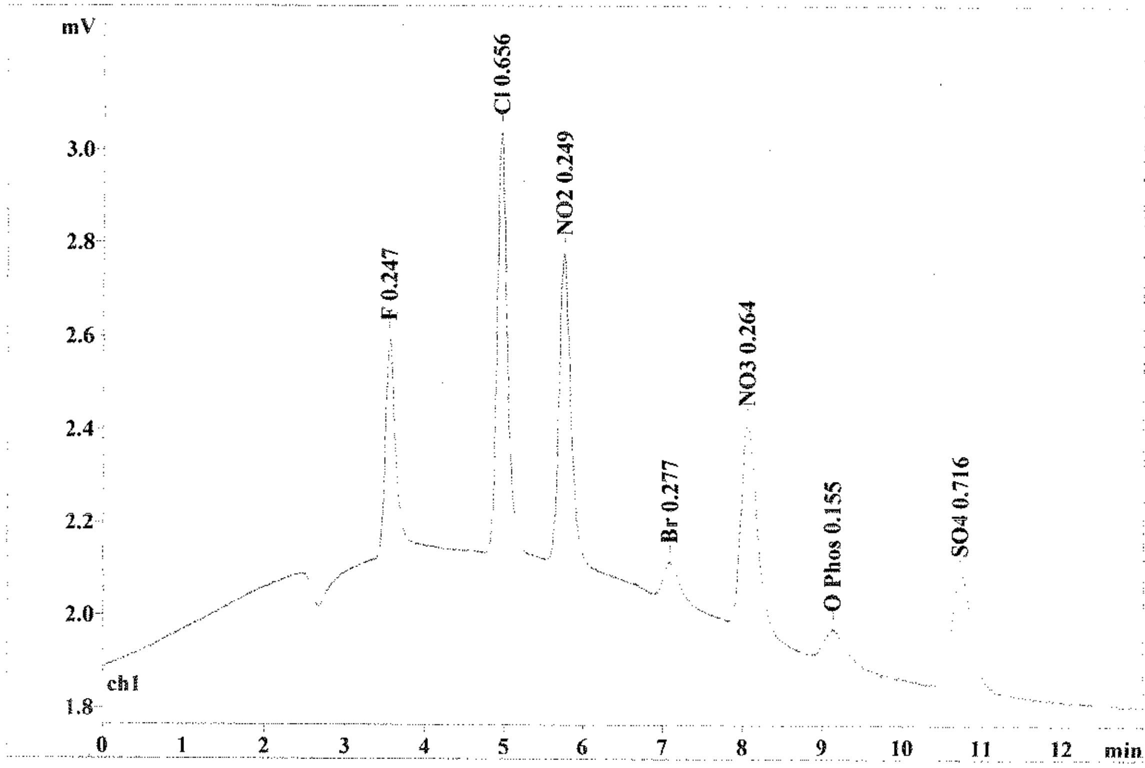


Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.55	0.129	0.46	4.105	0.87	0.2473	F
2	4.96	0.133	0.91	8.201	0.90	0.6561	Cl
3	5.76	0.155	0.67	6.991	0.90	0.2487	NO2
4	7.09	0.205	0.08	1.149	0.87	0.2774	Br
5	8.06	0.215	0.44	6.422	0.92	0.2638	NO3
6	9.14	0.278	0.07	1.277	0.82	0.1555	O Phos
7	10.74	0.263	0.25	4.430	0.89	0.7161	SO4
7	13.00	0.197	2.88	32.576	0.88	2.565	

METHOD 300.0/9056A

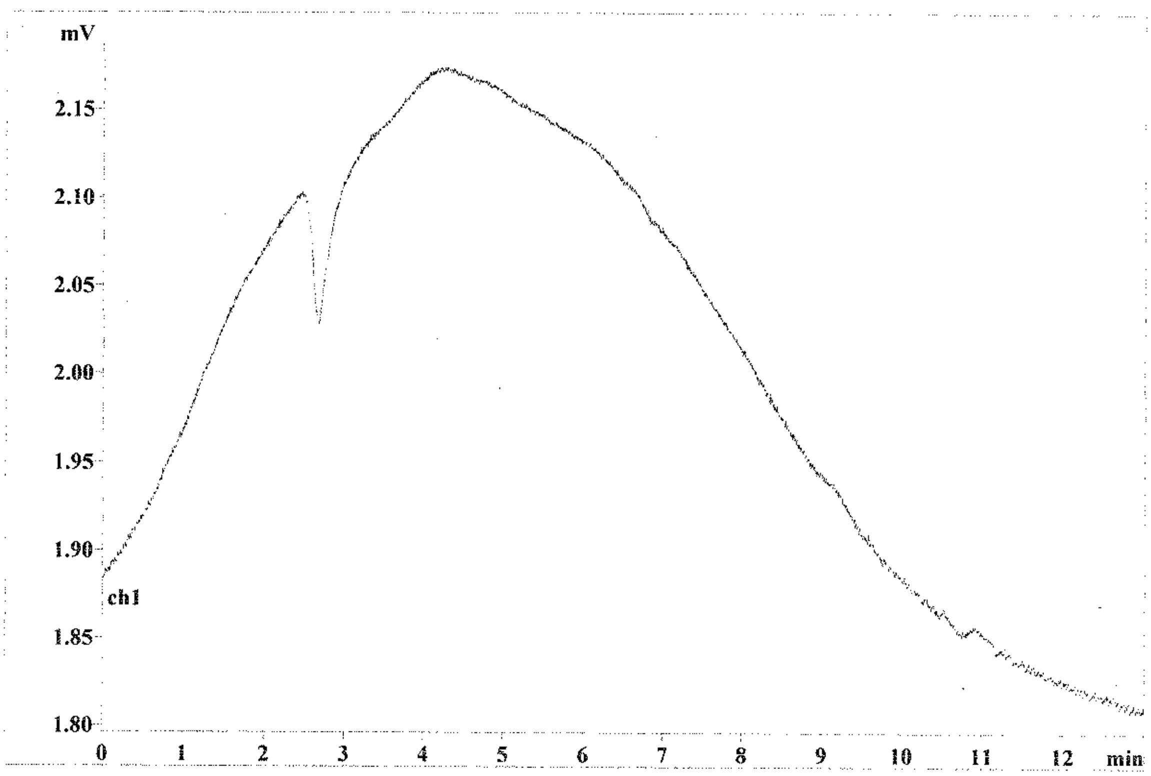
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:13:50
Printed by: Alexandra Jangrell-B

Ident: CCB
Analysis from: 3/21/2014 12:49:25
File: y3211249.CHW Last save: 3/25/2014 12:13:50

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87584

Dilution: 1
LIMS ID:
Vial number: 3
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No peaks
METHOD 300.0/9056A

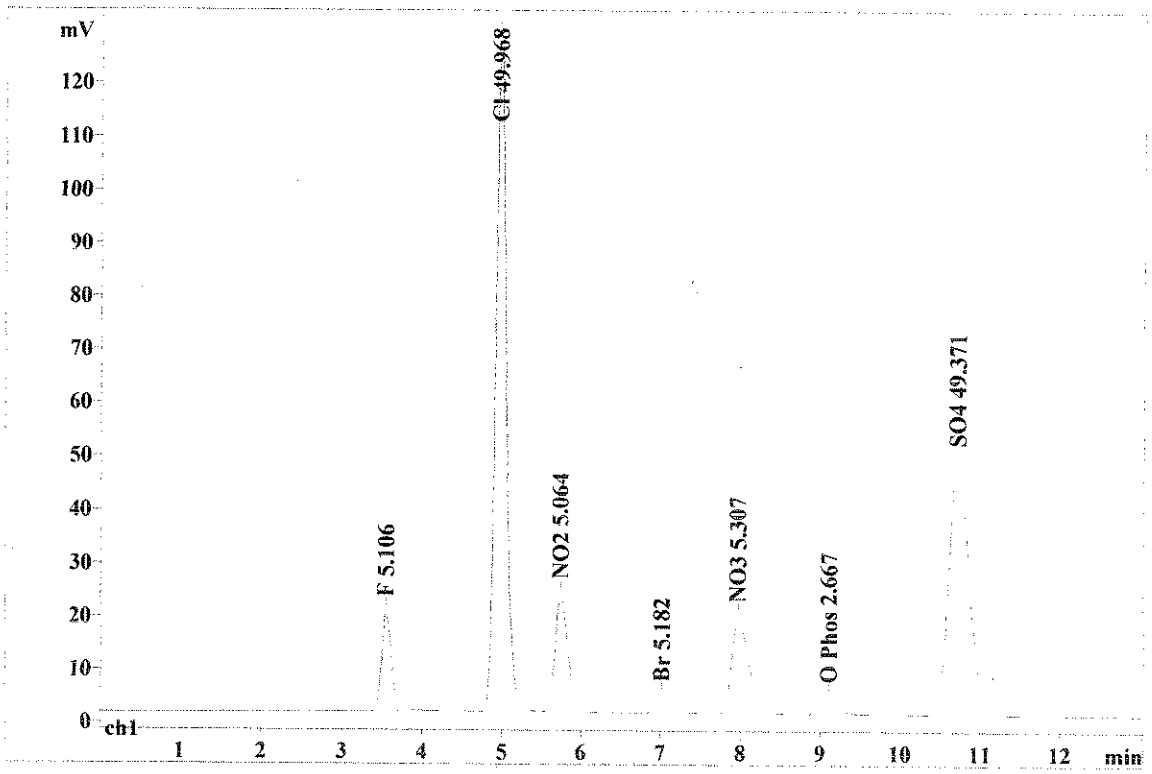
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:13:51
Printed by: Alexandra Jangrell-B

Ident: CCV
Analysis from: 3/21/2014 13:05:25
File: y3211305.CHW Last save: 3/25/2014 12:13:51

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87585

Dilution: 1
LIMS ID:
Vial number: 2
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.55	0.135	18.32	169.743	0.93	5.106	F
2	4.97	0.138	128.04	1177.050	0.93	49.97	Cl
3	5.74	0.175	21.78	246.167	0.99	5.064	NO2
4	7.03	0.207	2.68	37.624	0.88	5.182	Br
5	7.97	0.229	17.83	265.759	0.97	5.307	NO3
6	9.11	0.234	2.72	42.913	0.92	2.667	O Phos
7	10.72	0.271	47.24	830.251	0.98	49.37	SO4
7	13.00	0.199	238.62	2769.507	0.94	122.7	

METHOD 300.0/9056A

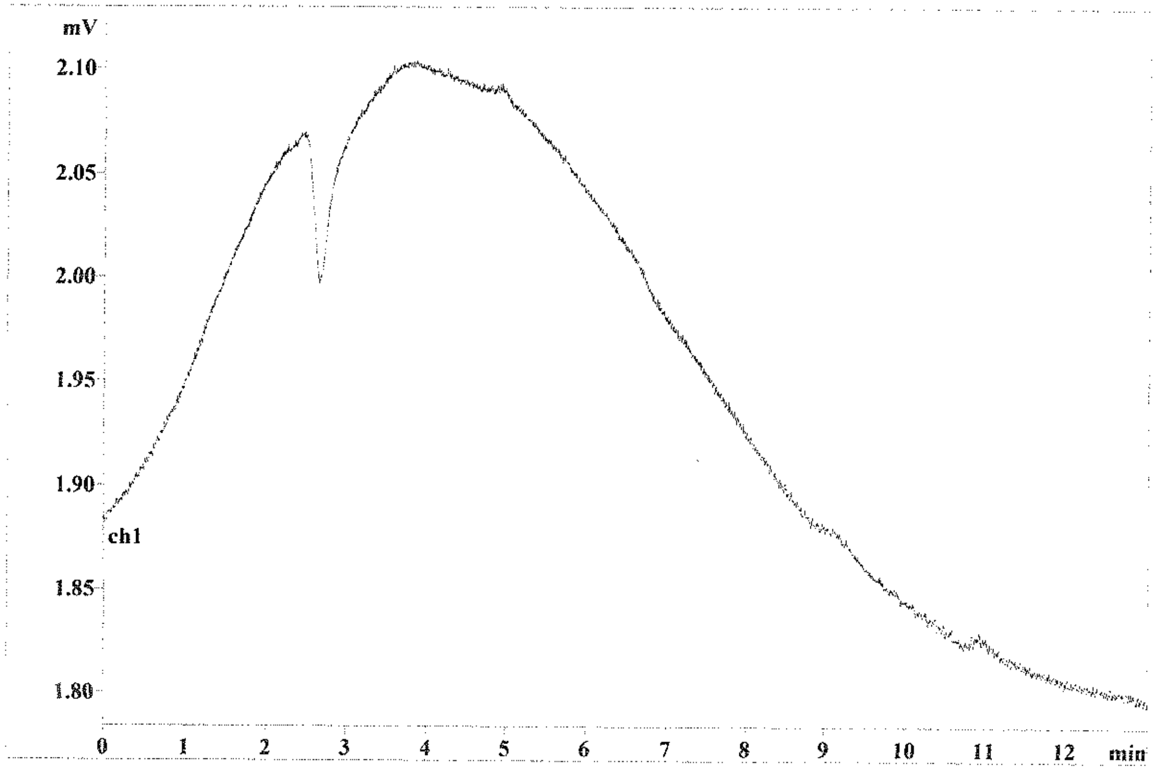
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:13:52
Printed by: Alexandra Jangrell-B

Ident: MB-384756
Analysis from: 3/21/2014 13:21:24
File: y3211321.CHW Last save: 3/25/2014 12:13:52

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87586

Dilution: 1
LIMS ID: JQ1402152-01
Vial number: 4
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No peaks
METHOD 300.0/9056A

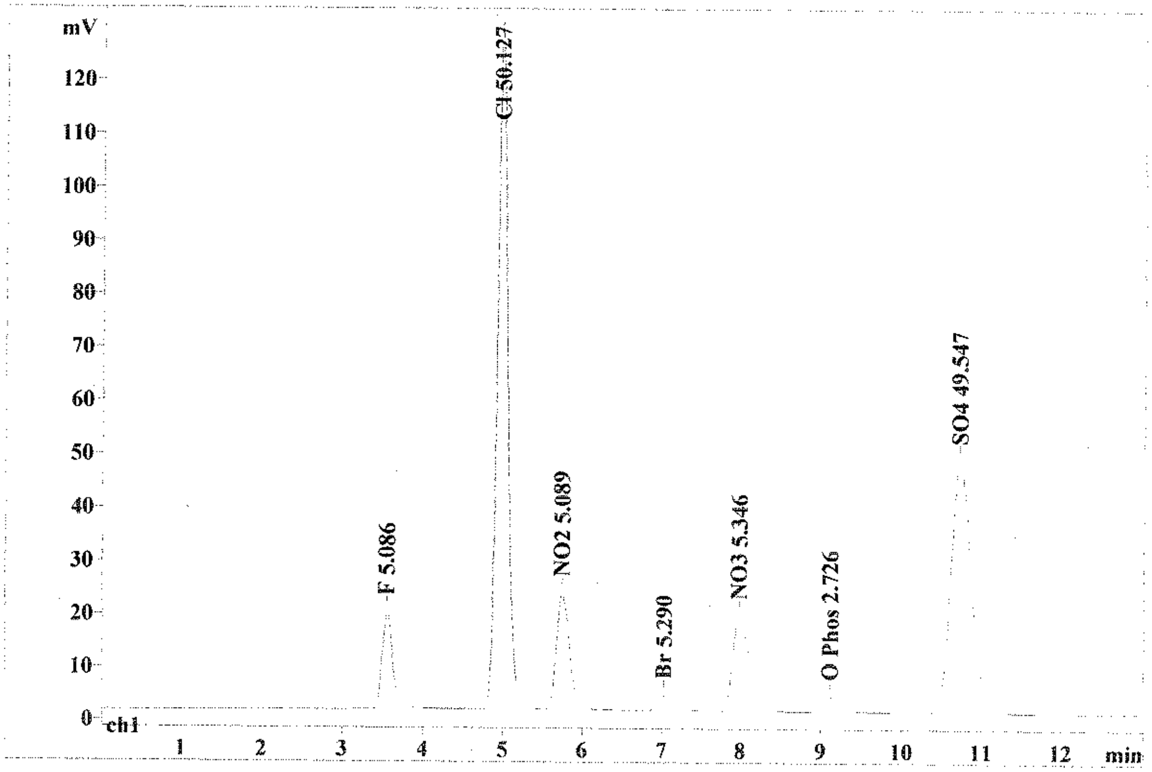
This report has been created by IC Net
METROHM LTD

Report date:	3/25/2014 12:13:52
Printed by:	Alexandra Jangrell-B

Ident:	LCS-384756	
Analysis from:	3/21/2014 13:37:23	
File:	y3211337.CHW	Last save: 3/25/2014 12:13:52

Method:	131210Cal.mtw	Last save: 3/16/2014 17:33:11
Run operator:	Alexandra Jangrell-B	
Analysis number:	87587	

Dilution:	1
LIMS ID:	JQ1402152-02
Vial number:	5
Volume:	1.0 µL
Amount:	1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.55	0.136	18.12	169.083	0.93	5.086	F
2	4.97	0.139	127.92	1180.812	0.93	50.13	Cl
3	5.75	0.175	21.80	247.421	0.99	5.089	NO2
4	7.03	0.209	2.71	38.462	0.88	5.29	Br
5	7.98	0.230	17.88	267.835	0.97	5.346	NO3
6	9.12	0.236	2.76	44.018	0.92	2.726	O Phos
7	10.72	0.272	47.28	833.256	0.98	49.55	SO4
7	13.00	0.200	238.46	2780.888	0.94	123.2	

METHOD 300.0/9056A

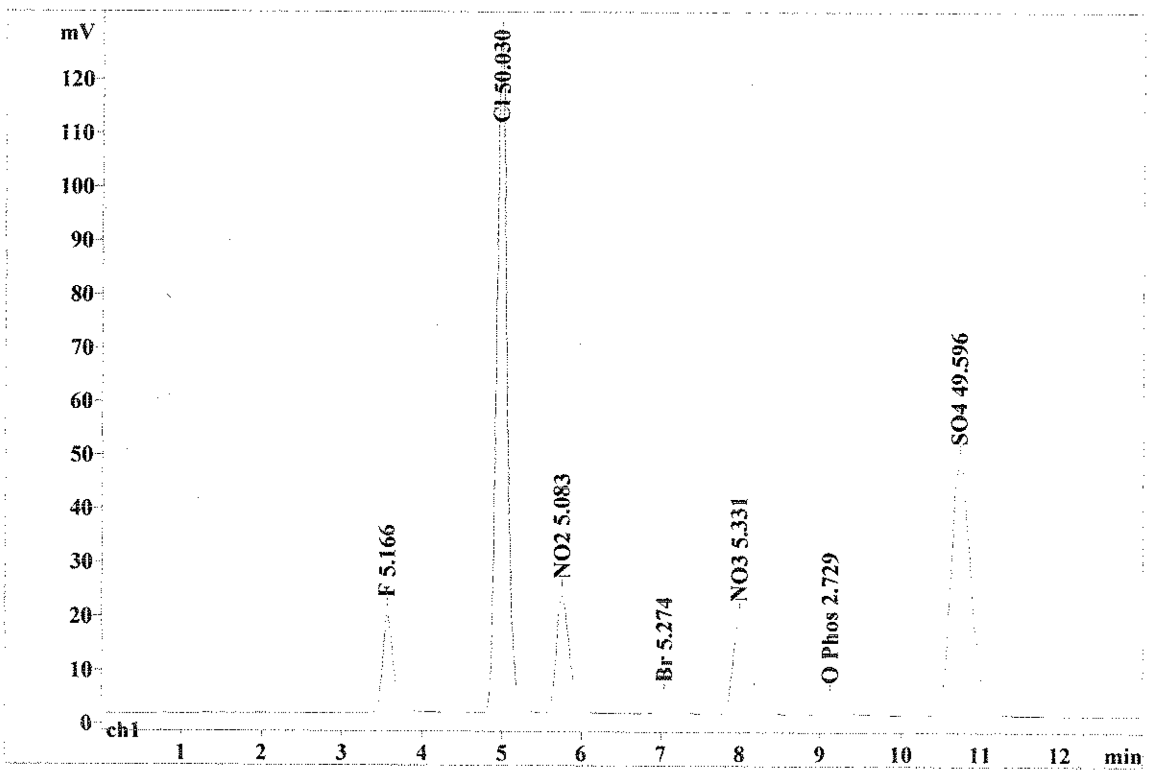
This report has been created by IC Net
METROHM LTD

```
Report date:        3/25/2014 12:14:00
Printed by:         Alexandra Jangrell-B

Ident:              CCV
Analysis from:      3/21/2014 16:09:21
File:               y3211609.CHW              Last save: 3/25/2014 12:14:00

Method:             131210Cal.mtw              Last save: 3/16/2014 17:33:11
Run operator:       Alexandra Jangrell-B
Analysis number:    87596

Dilution:             1
LIMS ID:
Vial number:        14
Volume:             1.0 µL
Amount:             1.0000
```



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.56	0.138	18.14	171.781	0.93	5.166	F
2	4.98	0.140	127.05	1178.526	0.93	50.03	Cl
3	5.76	0.176	21.68	247.094	0.99	5.083	NO2
4	7.05	0.211	2.68	38.338	0.88	5.274	Br
5	8.00	0.231	17.78	267.060	0.97	5.331	NO3
6	9.13	0.242	2.68	44.091	0.91	2.729	O Phos
7	10.74	0.272	47.16	834.085	0.98	49.6	SO4
7	13.00	0.201	237.16	2780.976	0.94	123.2	

METHOD 300.0/9056A

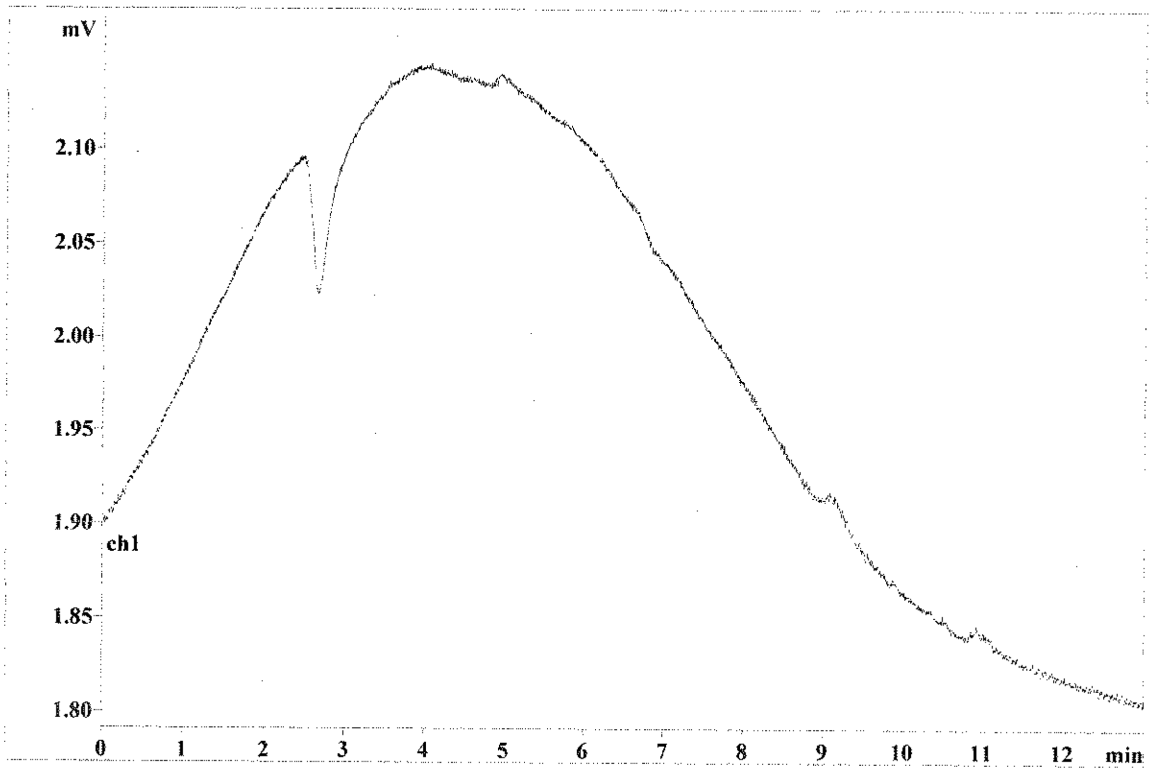
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:14:01
Printed by: Alexandra Jangrell-B

Ident: CCB
Analysis from: 3/21/2014 16:25:20
File: y3211625.CHW Last save: 3/25/2014 12:14:01

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87597

Dilution: 1
LIMS ID:
Vial number: 15
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No peaks
METHOD 300.0/9056A

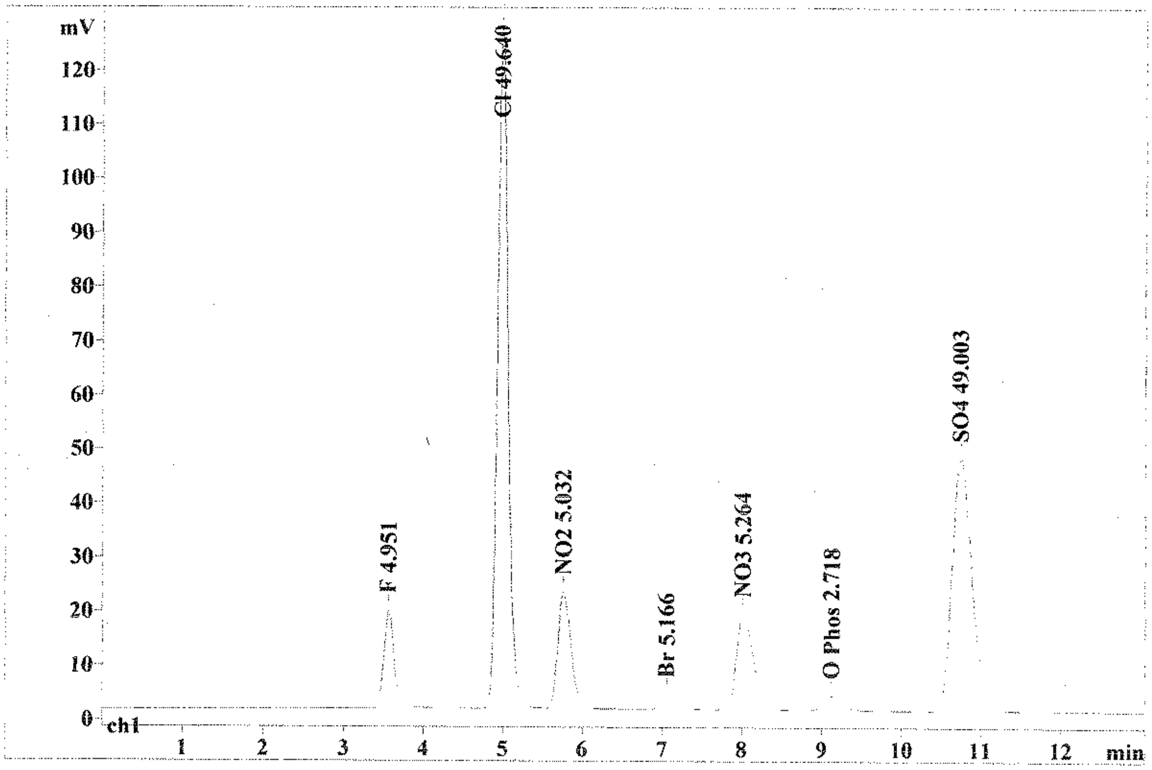
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:14:09
Printed by: Alexandra Jangrell-B

Ident: CCV
Analysis from: 3/21/2014 18:50:24
File: y3211850.CHW Last save: 3/25/2014 12:14:09

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87606

Dilution: 1
LIMS ID:
Vial number: 36
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.56	0.135	17.94	164.532	0.94	4.951	F
2	4.99	0.139	126.25	1169.296	0.93	49.64	Cl
3	5.77	0.176	21.48	244.640	0.99	5.032	NO2
4	7.06	0.210	2.66	37.494	0.89	5.166	Br
5	8.02	0.230	17.61	263.498	0.97	5.264	NO3
6	9.13	0.238	2.71	43.882	0.92	2.718	O Phos
7	10.75	0.272	46.66	823.954	0.98	49	SO4
7	13.00	0.200	235.32	2747.296	0.95	121.8	

METHOD 300.0/9056A

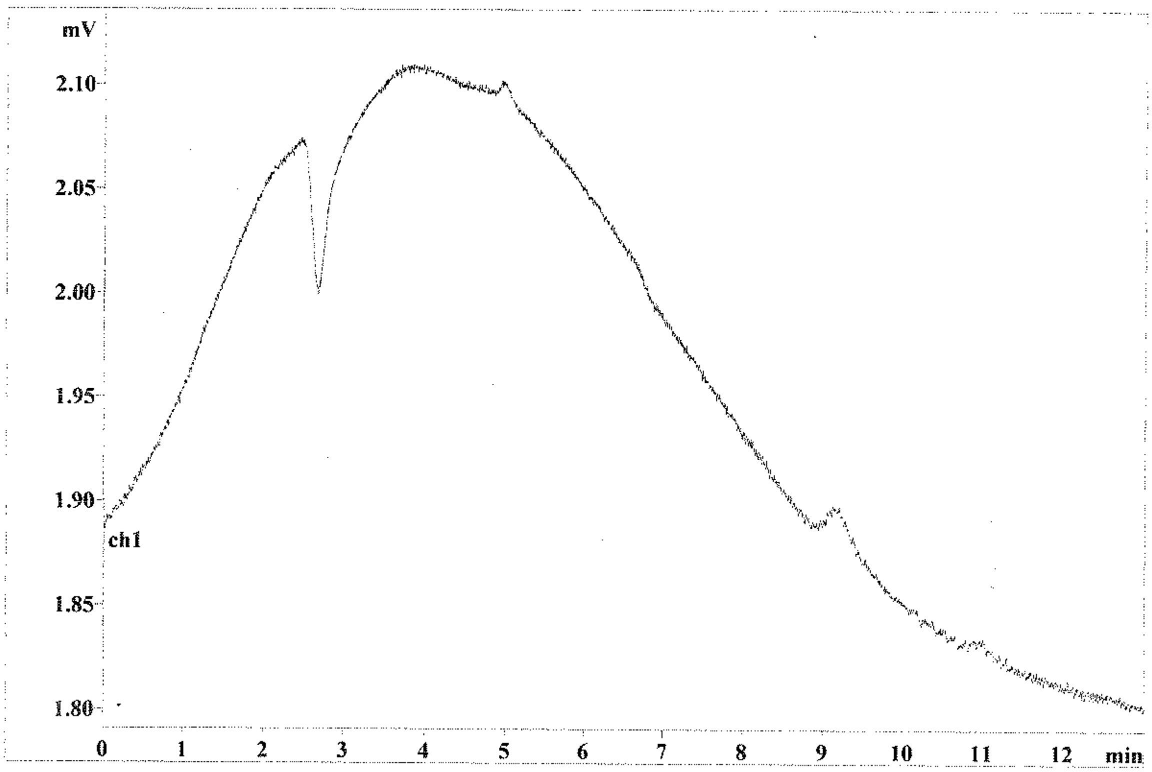
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:14:10
Printed by: Alexandra Jangrell-B

Ident: CCB
Analysis from: 3/21/2014 19:06:23
File: y3211906.CHW Last save: 3/25/2014 12:14:10

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87607

Dilution: 1
LIMS ID:
Vial number: 37
Volume: 1.0 µL
Amount: 1.0000

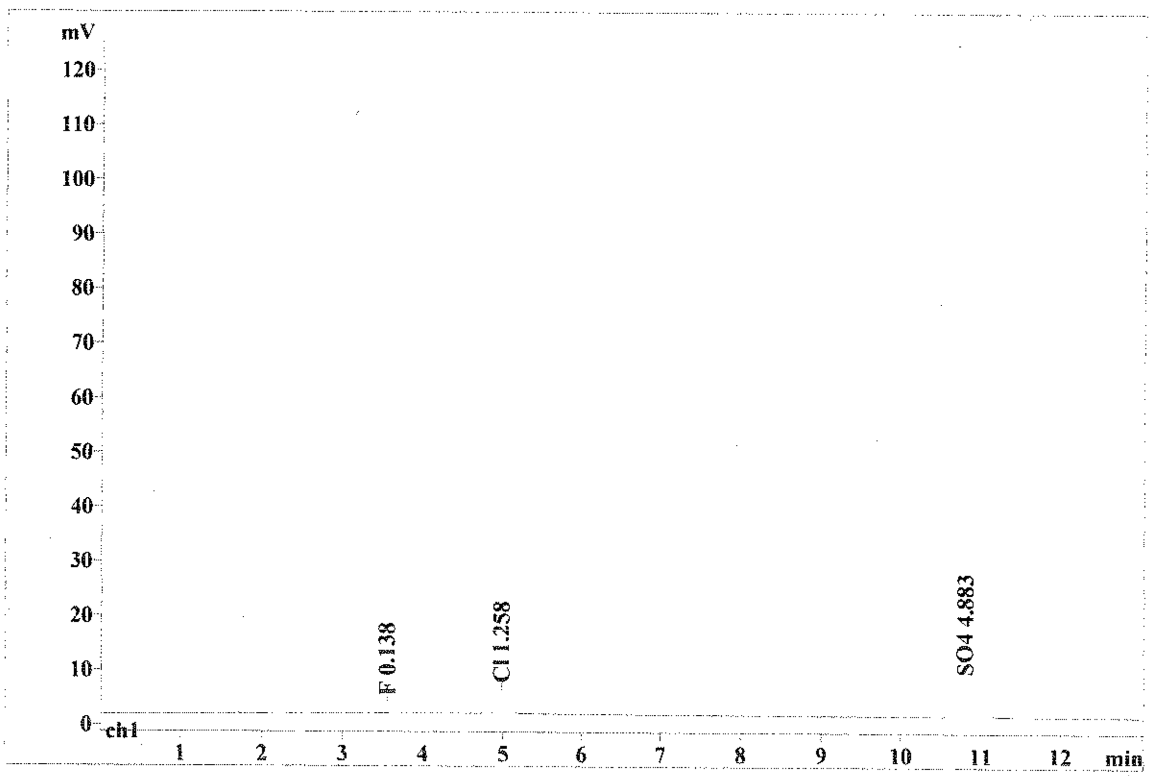


Quantitation method: Custom

No peaks
METHOD 300.0/9056A

This report has been created by IC Net
METROHM LTD

Report date:	3/25/2014 12:14:18	
Printed by:	Alexandra Jangrell-B	
Ident:	J1402025-001	
Analysis from:	3/21/2014 21:15:38	
File:	y3212115.CHW	Last save: 3/25/2014 12:14:18
Method:	131210Cal.mtw	Last save: 3/16/2014 17:33:11
Run operator:	Alexandra Jangrell-B	
Analysis number:	87615	
Dilution:	1	
LIMS ID:	J1402025-001	
Vial number:	23	
Volume:	1.0 µL	
Amount:	1.0000	



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.56	0.140	0.04	0.329	0.95	0.1378	F
2	4.98	0.136	2.46	22.497	0.92	1.258	Cl
3	0.00	0.000	0.00	0.000	0.00	0	NO2
4	0.00	0.000	0.00	0.000	0.00	0	Br
5	0.00	0.000	0.00	0.000	0.00	0	NO3
6	0.00	0.000	0.00	0.000	0.00	0	O Phos
7	10.81	0.251	4.54	74.680	0.97	4.883	SO4
7	13.00	0.075	7.04	97.506	0.41	6.279	

METHOD 300.0/9056A

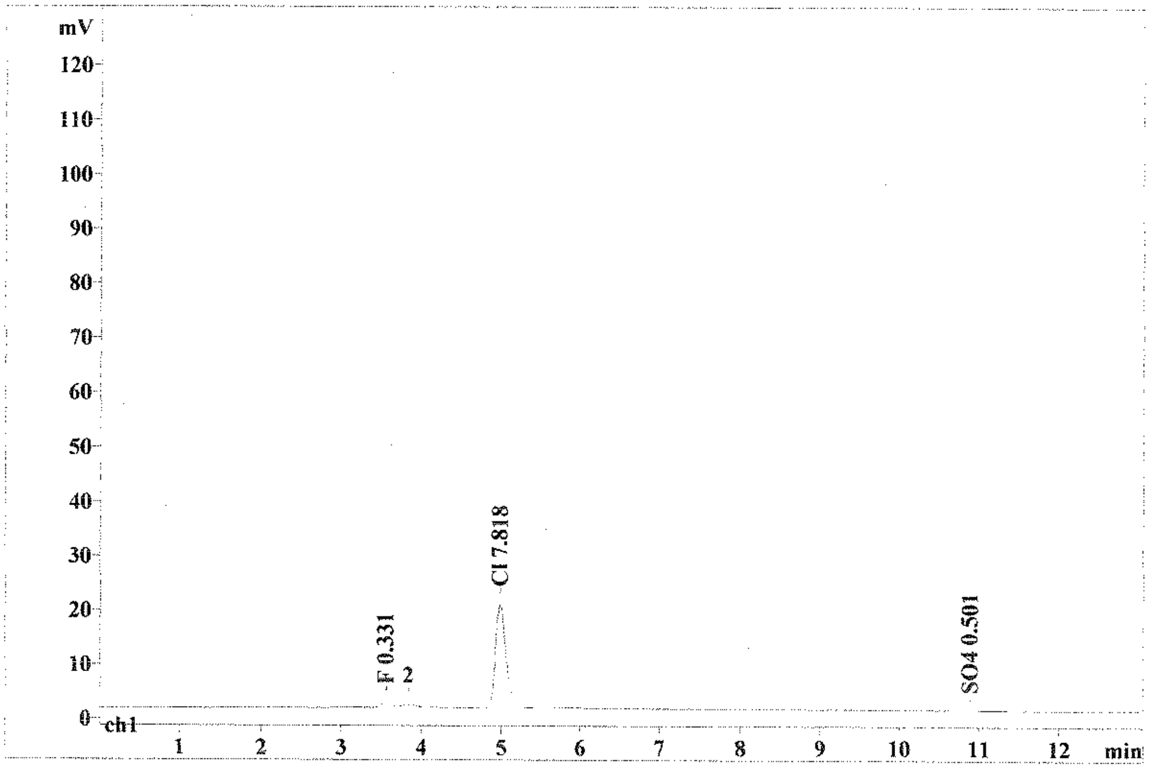
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:14:19
Printed by: Alexandra Jangrell-B

Ident: J1402025-002
Analysis from: 3/21/2014 21:31:36
File: y3212131.CHW Last save: 3/25/2014 12:14:19

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87616

Dilution: 1
LIMS ID: J1402025-002
Vial number: 24
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.55	0.119	0.94	6.982	1.03	0.3308	F
2	4.98	0.141	19.17	178.166	0.95	7.818	Cl
3	0.00	0.000	0.00	0.000	0.00	0	NO2
4	0.00	0.000	0.00	0.000	0.00	0	Br
5	0.00	0.000	0.00	0.000	0.00	0	NO3
6	0.00	0.000	0.00	0.000	0.00	0	O Phos
7	10.90	0.324	0.04	0.813	0.86	0.5014	SO4
7	13.00	0.083	20.15	185.961	0.41	8.651	

METHOD 300.0/9056A

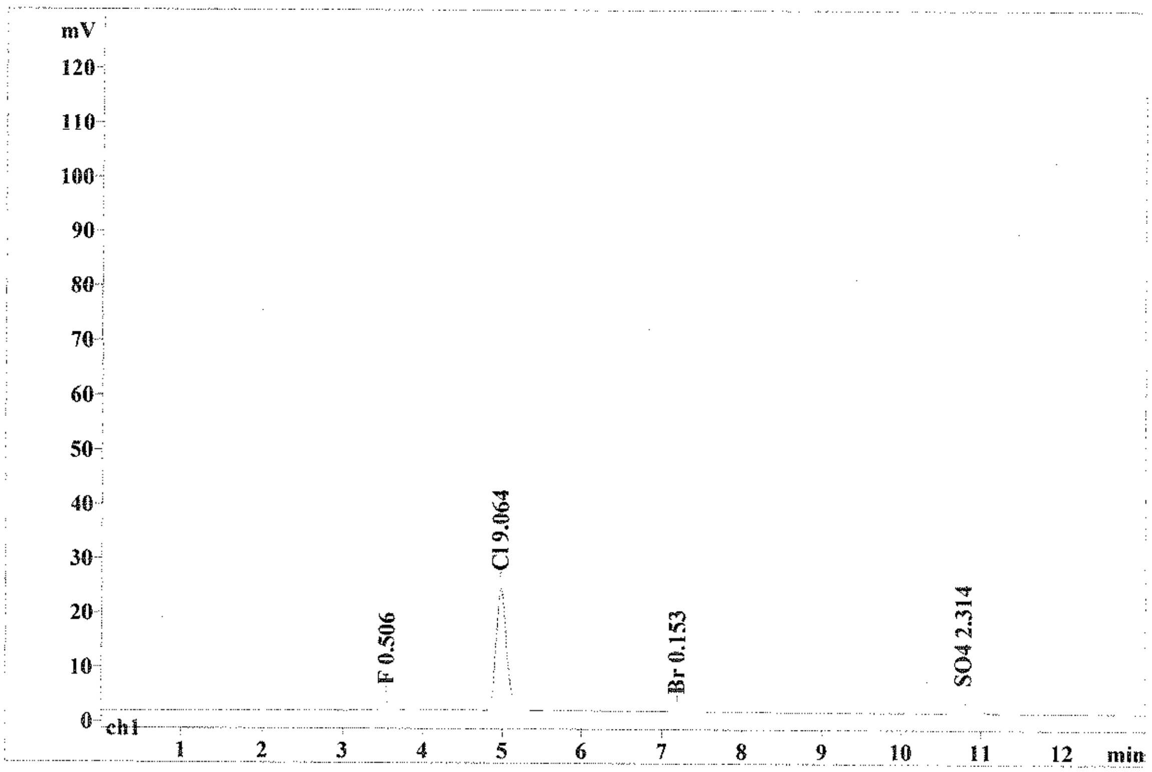
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:14:20
Printed by: Alexandra Jangrell-B

Ident: J1402025-003
Analysis from: 3/21/2014 21:47:36
File: y3212147.CHW Last save: 3/25/2014 12:14:20

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87617

Dilution: 1
LIMS ID: J1402025-003
Vial number: 25
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.56	0.128	1.48	13.030	0.88	0.5064	F
2	4.98	0.139	22.48	207.723	0.95	9.064	Cl
3	0.00	0.000	0.00	0.000	0.00	0	NO2
4	7.19	0.209	0.02	0.269	0.93	0.1531	Br
5	0.00	0.000	0.00	0.000	0.00	0	NO3
6	0.00	0.000	0.00	0.000	0.00	0	O Phos
7	10.79	0.247	1.91	31.363	0.94	2.314	SO4
7	13.00	0.103	25.90	252.386	0.53	12.04	

METHOD 300.0/9056A

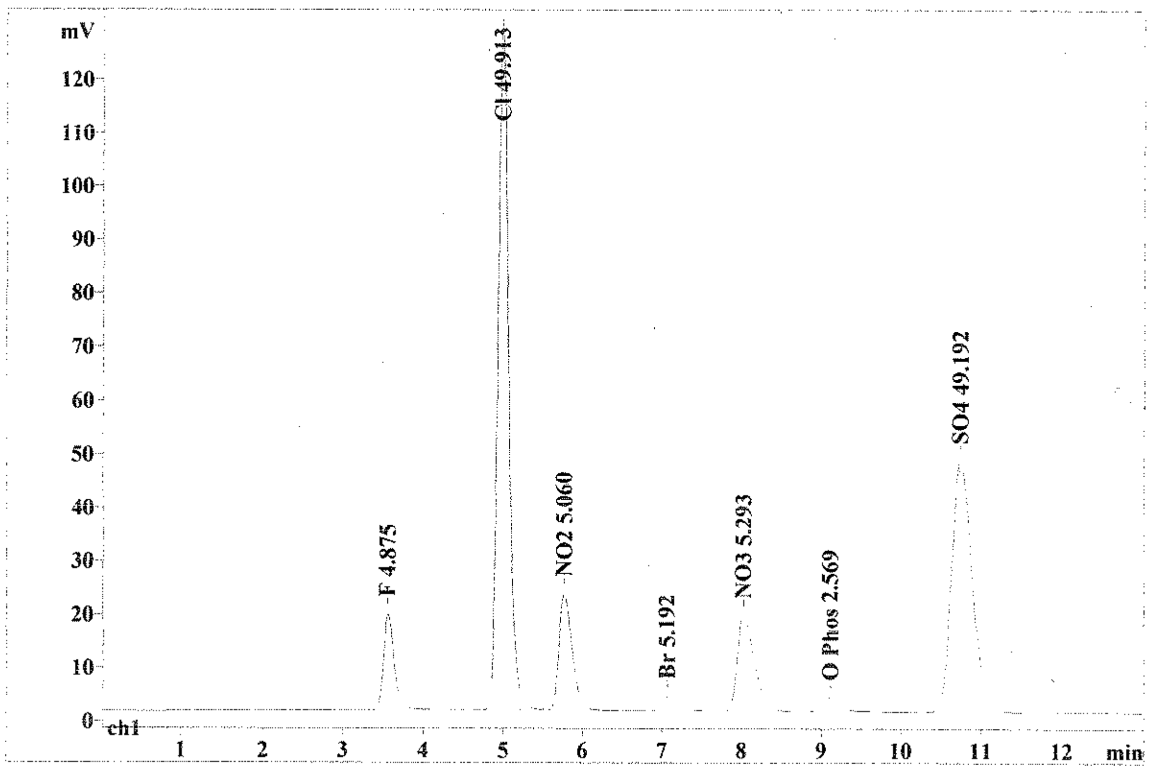
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:14:21
Printed by: Alexandra Jangrell-B

Ident: CCV
Analysis from: 3/21/2014 22:03:35
File: y3212203.CHW Last save: 3/25/2014 12:14:21

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87618

Dilution: 1
LIMS ID:
Vial number: 26
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.56	0.135	17.84	161.941	0.94	4.875	F
2	4.99	0.139	127.34	1175.762	0.93	49.91	Cl
3	5.77	0.176	21.61	245.983	0.99	5.06	NO2
4	7.07	0.213	2.65	37.694	0.91	5.192	Br
5	8.02	0.229	17.77	265.062	0.97	5.293	NO3
6	9.12	0.234	2.60	41.095	0.92	2.569	O Phos
7	10.74	0.271	46.96	827.180	0.98	49.19	SO4
7	13.00	0.200	236.77	2754.716	0.95	122.1	

METHOD 300.0/9056A

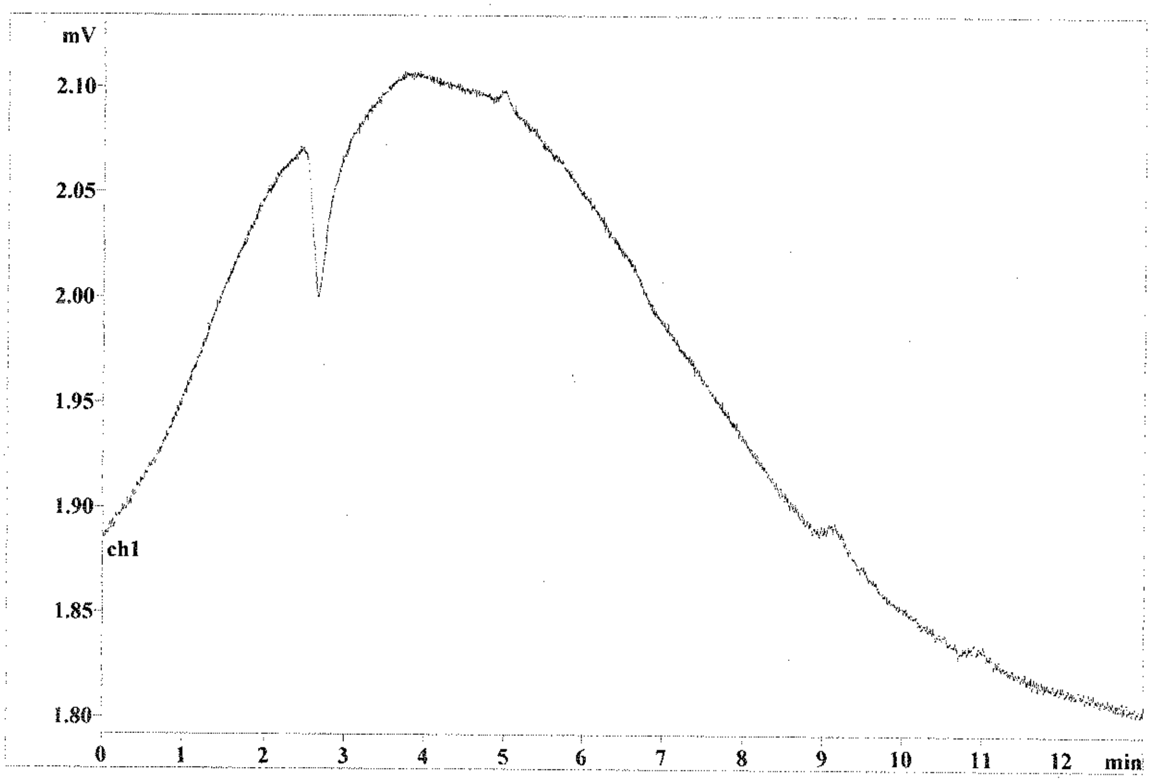
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:14:21
Printed by: Alexandra Jangrell-B

Ident: CCB
Analysis from: 3/21/2014 22:19:34
File: y3212219.CHW Last save: 3/25/2014 12:14:21

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87619

Dilution: 1
LIMS ID:
Vial number: 27
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No peaks
METHOD 300.0/9056A

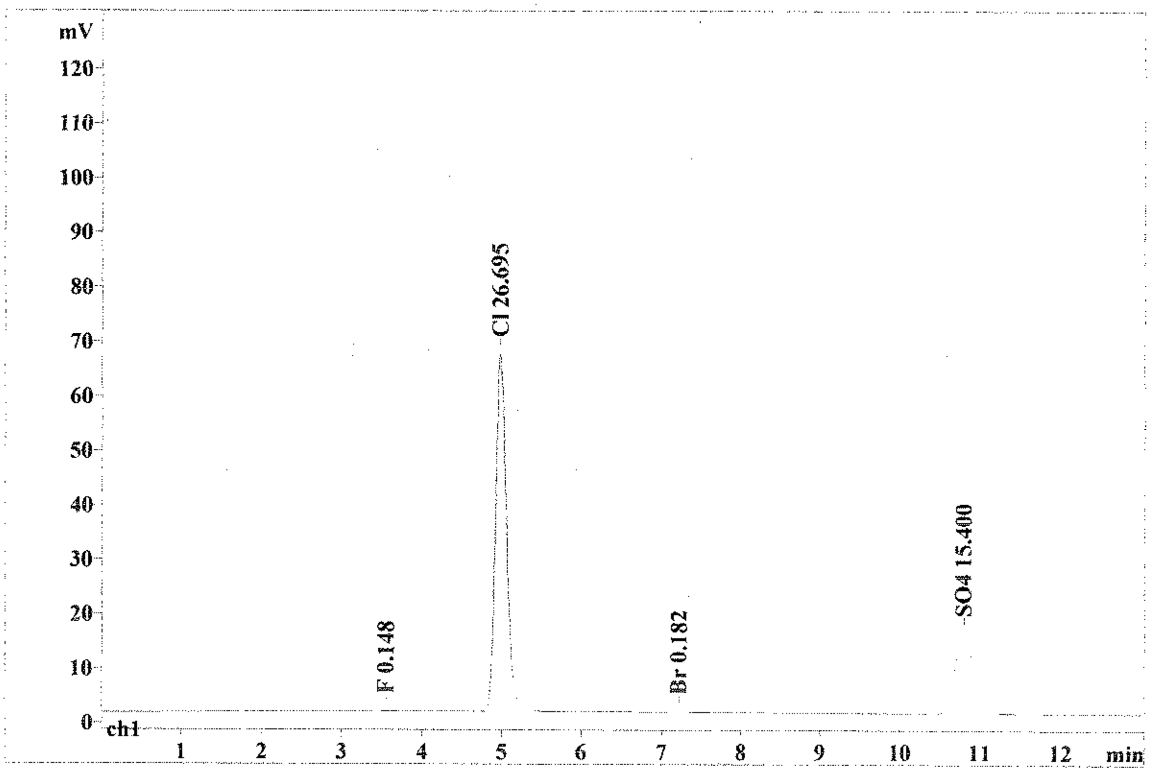
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:14:22
Printed by: Alexandra Jangrell-B

Ident: J1402025-004
Analysis from: 3/21/2014 22:35:33
File: y3212235.CHW Last save: 3/25/2014 12:14:22

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87620

Dilution: 1
LIMS ID: J1402025-004
Vial number: 38
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.55	0.142	0.07	0.692	0.93	0.1483	F
2	4.98	0.144	65.54	625.793	0.94	26.69	Cl
3	0.00	0.000	0.00	0.000	0.00	0	NO2
4	7.22	0.248	0.03	0.477	0.88	0.1825	Br
5	0.00	0.000	0.00	0.000	0.00	0	NO3
6	0.00	0.000	0.00	0.000	0.00	0	O Phos
7	10.80	0.264	14.77	252.358	0.99	15.4	SO4
7	13.00	0.114	80.41	879.319	0.54	42.43	

METHOD 300.0/9056A

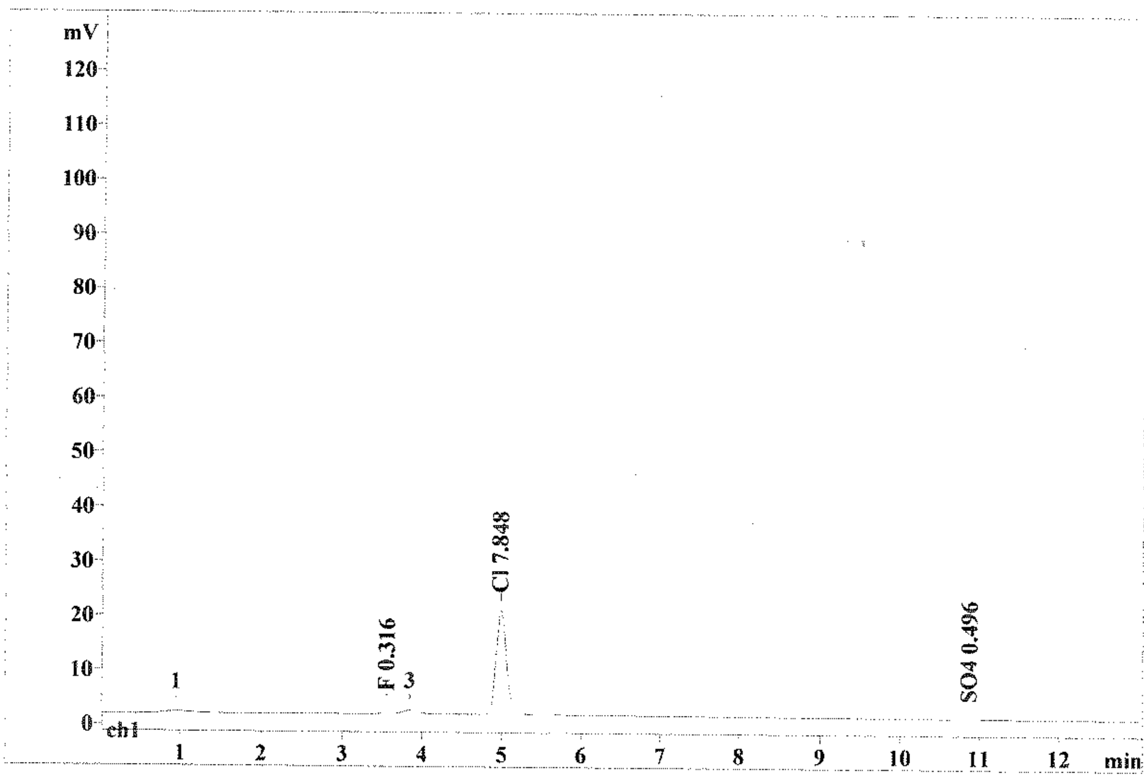
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:14:23
Printed by: Alexandra Jangrell-B

Ident: J1402025-005
Analysis from: 3/21/2014 22:51:32
File: y3212251.CHW   Last save: 3/25/2014 12:14:23

Method: 131210Cal.mtw   Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87621

Dilution: 1
LIMS ID: J1402025-005
Vial number: 39
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.55	0.118	0.88	6.466	1.04	0.3159	F
2	4.98	0.140	19.19	178.866	0.94	7.848	Cl
3	0.00	0.000	0.00	0.000	0.00	0	NO2
4	0.00	0.000	0.00	0.000	0.00	0	Br
5	0.00	0.000	0.00	0.000	0.00	0	NO3
6	0.00	0.000	0.00	0.000	0.00	0	O Phos
7	10.89	0.310	0.04	0.731	0.89	0.4965	SO4
7	13.00	0.081	20.11	186.063	0.41	8.66	

METHOD 300.0/9056A

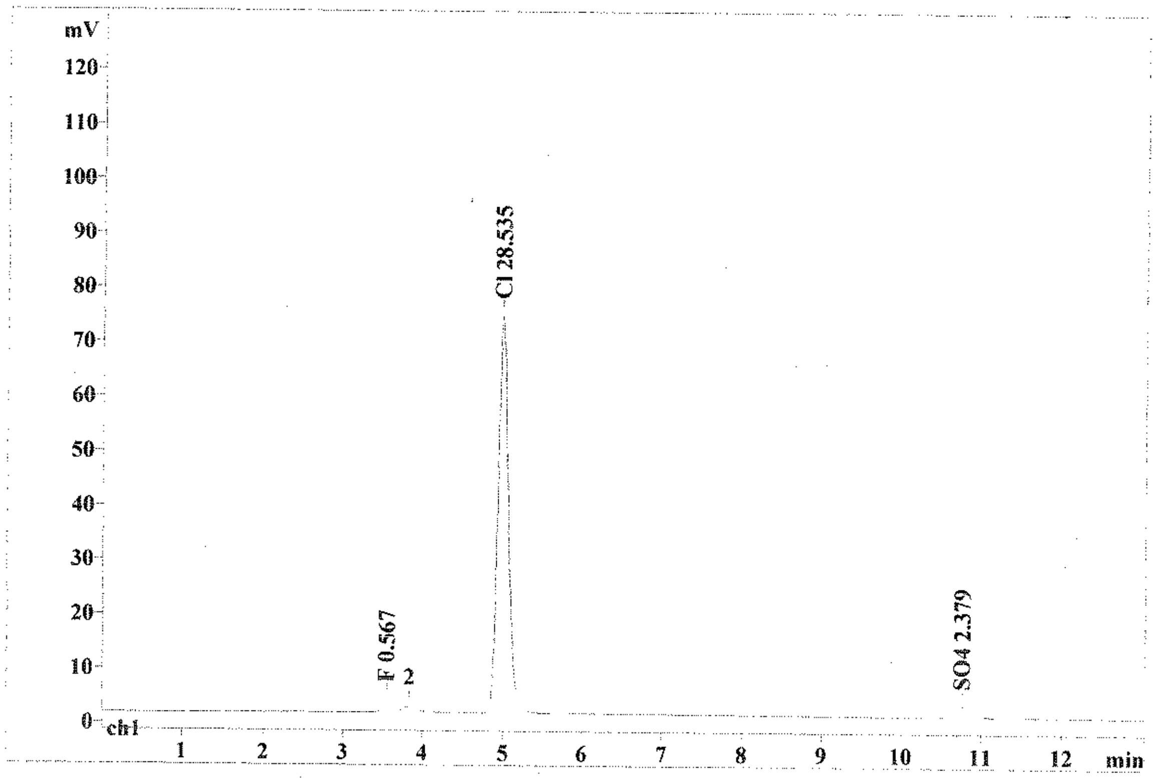
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:14:24
Printed by: Alexandra Jangrell-B

Ident: J1402025-006
Analysis from: 3/21/2014 23:07:31
File: y3212307.CHW Last save: 3/25/2014 12:14:24

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87622

Dilution: 1
LIMS ID: J1402025-006
Vial number: 40
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.55	0.116	2.08	15.101	1.02	0.5666	F
2	4.98	0.138	72.79	669.413	0.94	28.54	Cl
3	0.00	0.000	0.00	0.000	0.00	0	NO2
4	0.00	0.000	0.00	0.000	0.00	0	Br
5	0.00	0.000	0.00	0.000	0.00	0	NO3
6	0.00	0.000	0.00	0.000	0.00	0	O Phos
7	10.78	0.242	2.01	32.453	0.93	2.379	SO4
7	13.00	0.071	76.88	716.967	0.41	31.48	

METHOD 300.0/9056A

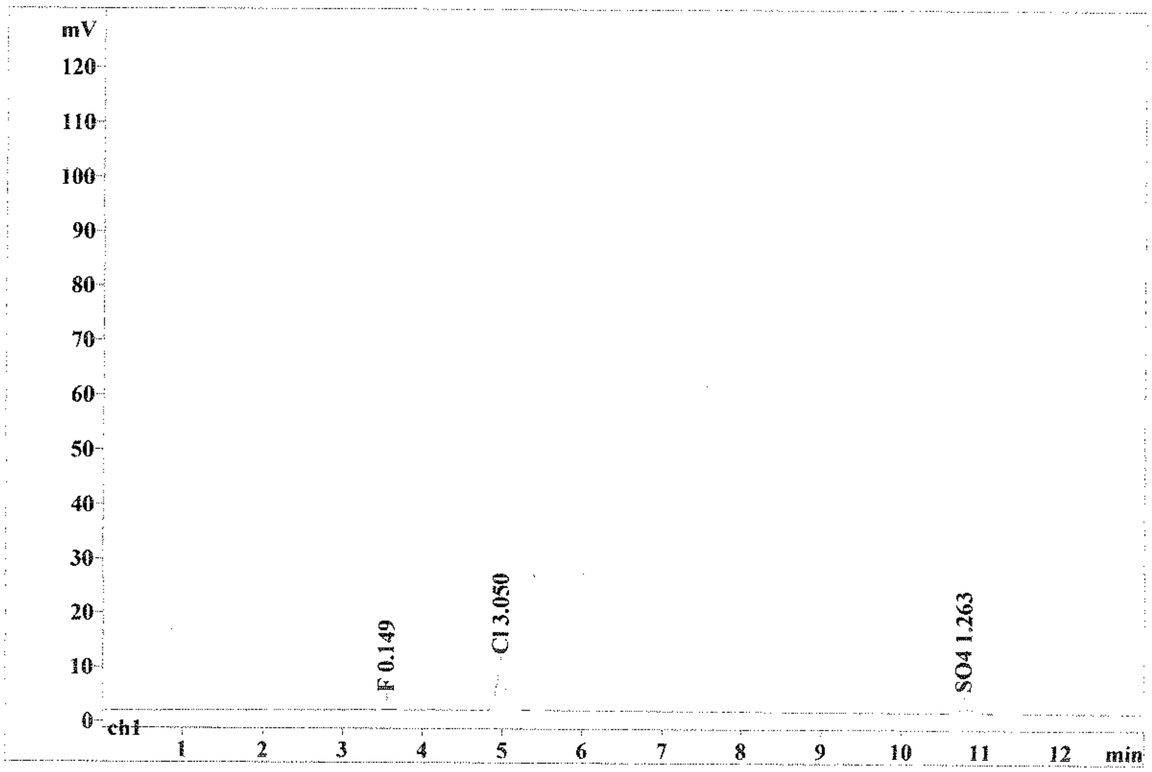
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:14:25
Printed by: Alexandra Jangrell-B

Ident: J1402025-007
Analysis from: 3/21/2014 23:23:30
File: y3212323.CHW Last save: 3/25/2014 12:14:25

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87623

Dilution: 1
LIMS ID: J1402025-007
Vial number: 41
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.55	0.139	0.08	0.720	0.96	0.1491	F
2	4.98	0.137	7.13	65.017	0.94	3.05	Cl
3	0.00	0.000	0.00	0.000	0.00	0	NO2
4	0.00	0.000	0.00	0.000	0.00	0	Br
5	0.00	0.000	0.00	0.000	0.00	0	NO3
6	0.00	0.000	0.00	0.000	0.00	0	O Phos
7	10.80	0.256	0.79	13.640	0.92	1.263	SO4
7	13.00	0.076	8.00	79.377	0.40	4.462	

METHOD 300.0/9056A

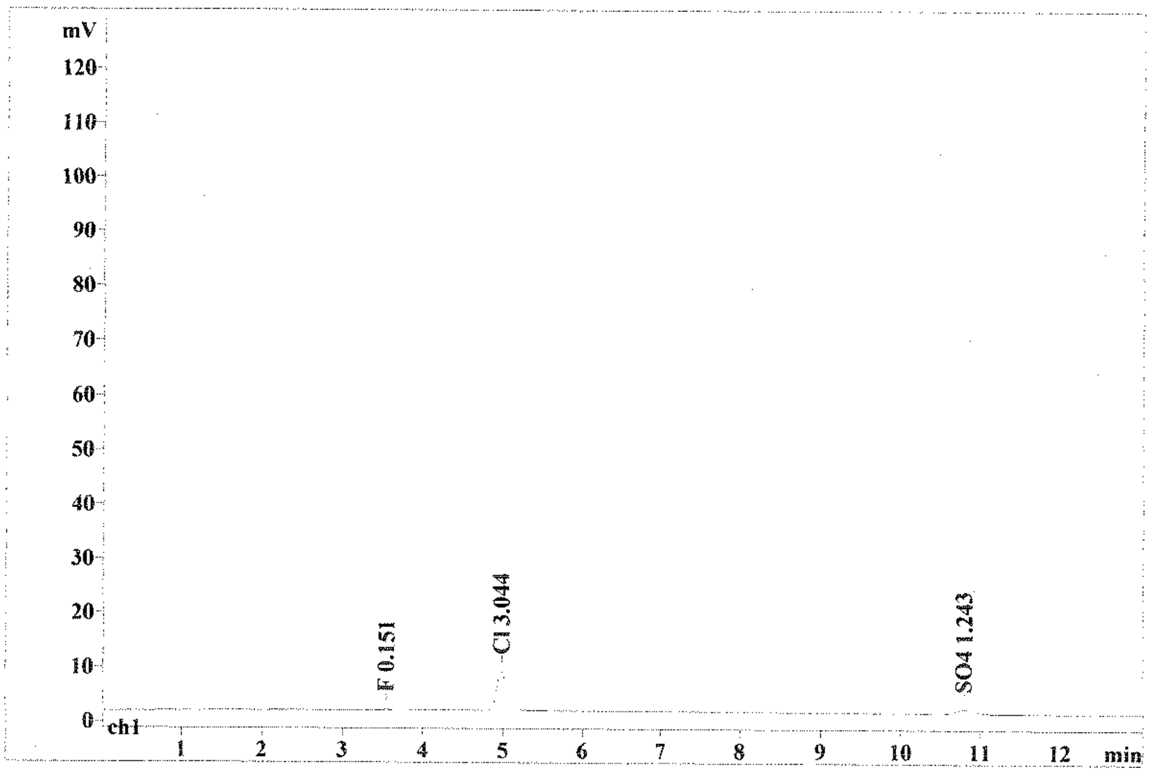
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:14:26
Printed by: Alexandra Jangrell-B

Ident: J1402025-007DUP
Analysis from: 3/21/2014 23:39:29
File: y3212339.CHW Last save: 3/25/2014 12:14:26

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87624

Dilution: 1
LIMS ID: JQ1402152-06
Vial number: 42
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.55	0.141	0.08	0.783	0.88	0.151	F
2	4.98	0.137	7.12	64.885	0.94	3.044	Cl
3	0.00	0.000	0.00	0.000	0.00	0	NO2
4	0.00	0.000	0.00	0.000	0.00	0	Br
5	0.00	0.000	0.00	0.000	0.00	0	NO3
6	0.00	0.000	0.00	0.000	0.00	0	O Phos
7	10.80	0.255	0.78	13.310	0.92	1.243	SO4
7	13.00	0.076	7.99	78.978	0.39	4.439	

METHOD 300.0/9056A

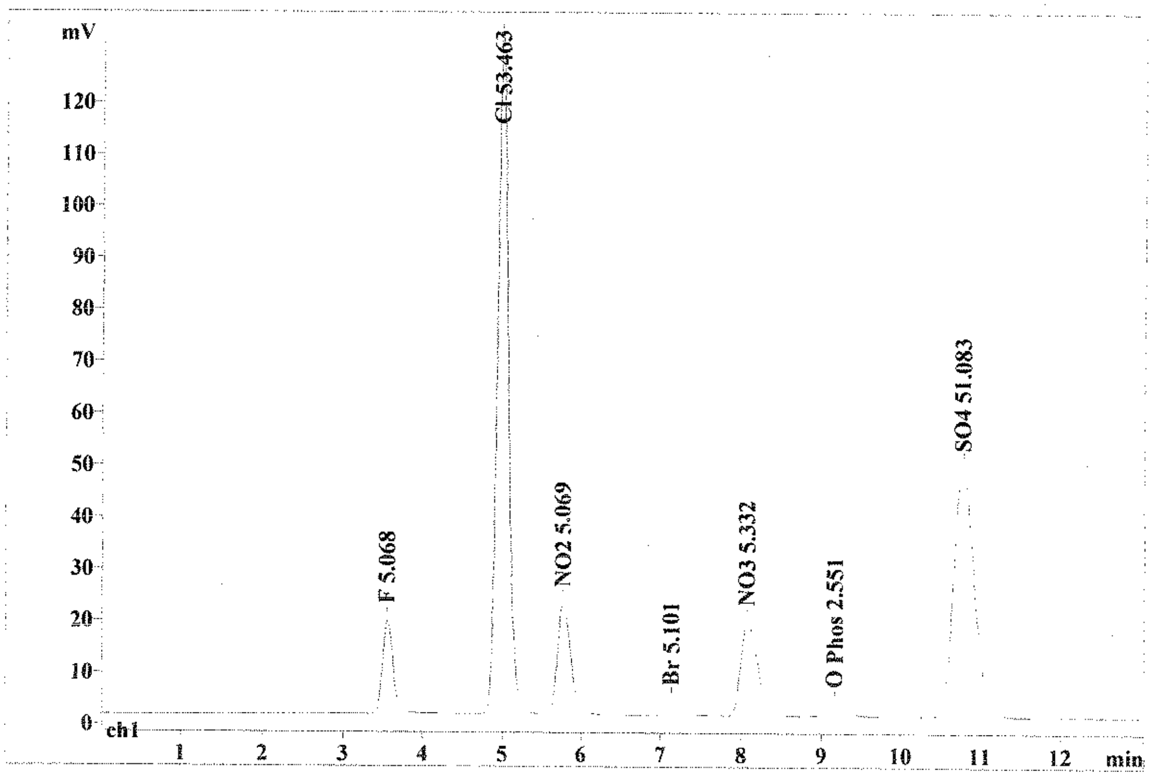
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:14:27
Printed by: Alexandra Jangrell-B

Ident: J1402025-007 MS
Analysis from: 3/21/2014 23:55:30
File: y3212355.CHW Last save: 3/25/2014 12:14:27

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87625

Dilution: 1
LIMS ID: JQ1402152-05
Vial number: 43
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.55	0.141	17.85	168.484	0.95	5.068	F
2	4.99	0.144	131.70	1259.779	0.94	53.46	Cl
3	5.77	0.180	21.19	246.418	0.99	5.069	NO2
4	7.14	0.243	2.43	36.990	1.02	5.101	Br
5	8.08	0.232	17.92	267.101	1.00	5.332	NO3
6	9.17	0.267	2.27	40.762	0.94	2.551	O Phos
7	10.78	0.277	47.99	859.523	0.99	51.08	SO4
7	13.00	0.212	241.36	2879.057	0.98	127.7	

METHOD 300.0/9056A

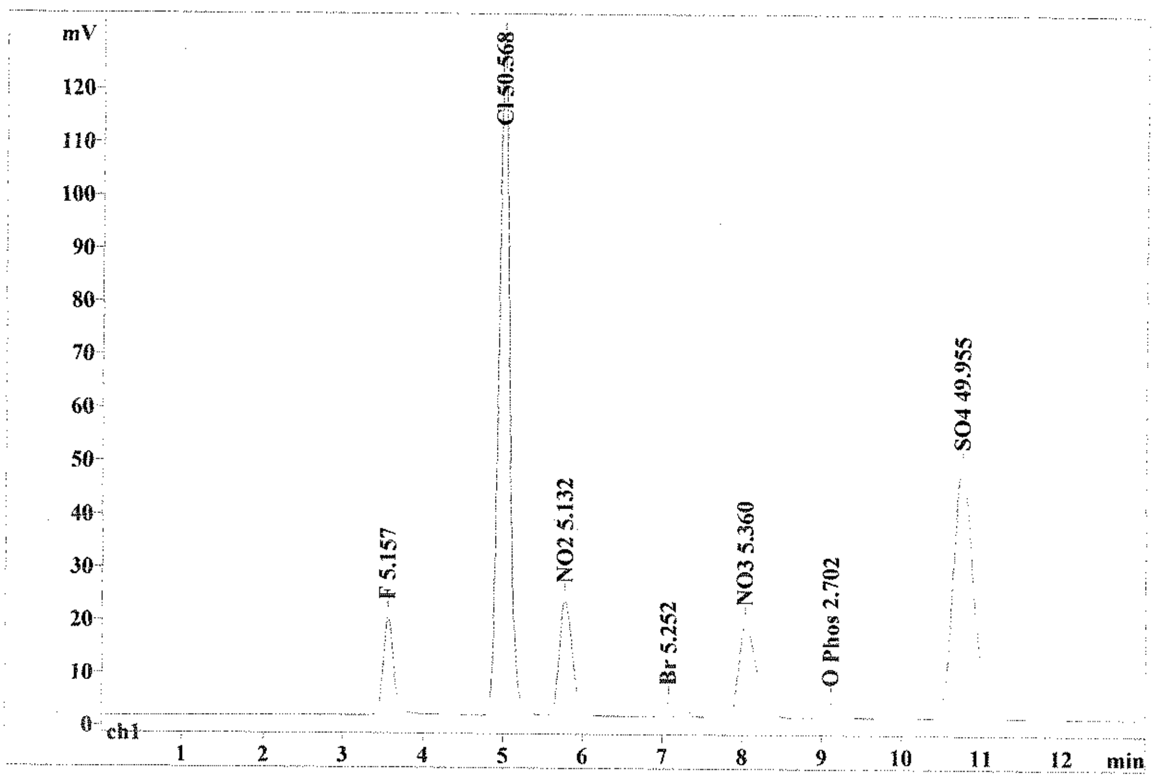
This report has been created by IC Net
METROHM LTD

Report date:	3/25/2014 12:14:31
Printed by:	Alexandra Jangrell-B

Ident:	CCV	
Analysis from:	3/22/2014 01:15:26	
File:	y3220115.CHW	Last save: 3/25/2014 12:14:31

Method:	131210Cal.mtw	Last save: 3/16/2014 17:33:11
Run operator:	Alexandra Jangrell-B	
Analysis number:	87630	

Dilution:	1
LIMS ID:	
Vial number:	48
Volume:	1.0 µL
Amount:	1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.56	0.136	18.43	171.487	0.94	5.157	F
2	4.99	0.140	128.49	1191.271	0.93	50.57	Cl
3	5.78	0.177	21.82	249.475	0.99	5.132	NO2
4	7.08	0.213	2.67	38.166	0.90	5.252	Br
5	8.04	0.231	17.90	268.581	0.97	5.36	NO3
6	9.12	0.237	2.72	43.566	0.92	2.702	O Phos
7	10.75	0.272	47.53	840.231	0.98	49.95	SO4
7	13.00	0.201	239.56	2802.778	0.95	124.1	

METHOD 300.0/9056A

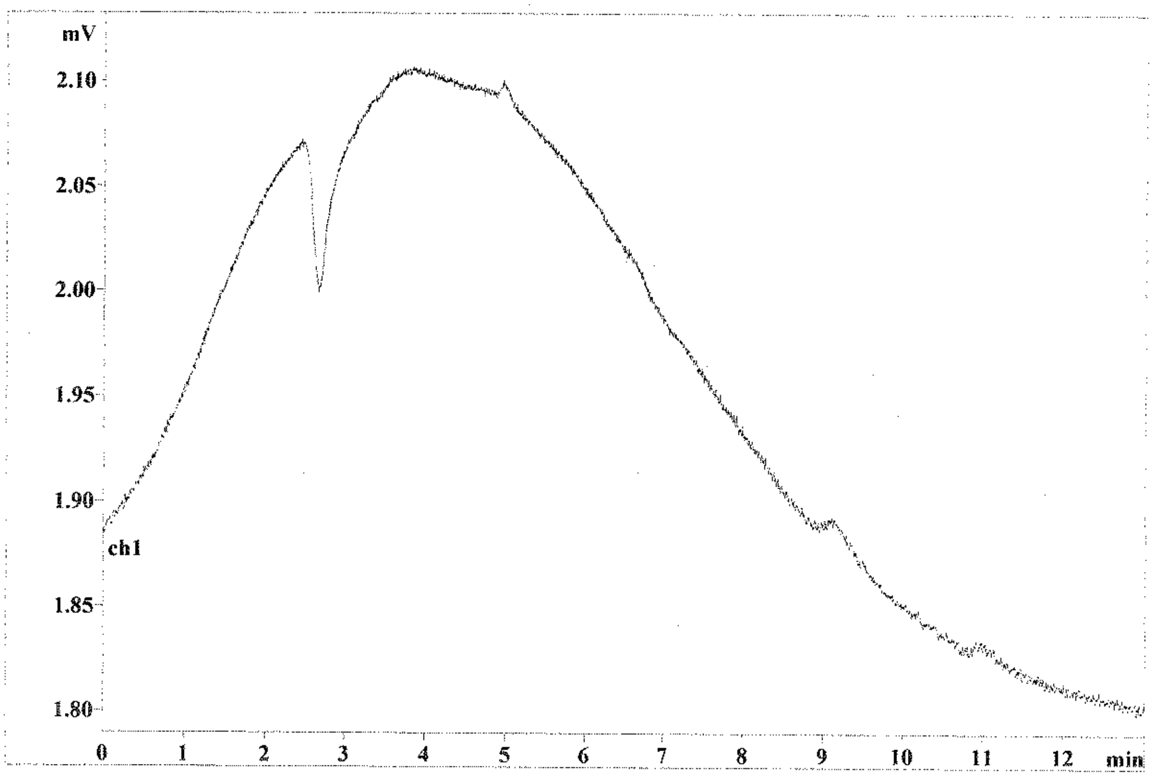
This report has been created by IC Net
METROHM LTD

Report date: 3/25/2014 12:14:32
Printed by: Alexandra Jangrell-B

Ident: CCB
Analysis from: 3/22/2014 01:31:25
File: y3220131.CHW Last save: 3/25/2014 12:14:32

Method: 131210Cal.mtw Last save: 3/16/2014 17:33:11
Run operator: Alexandra Jangrell-B
Analysis number: 87631

Dilution: 1
LIMS ID:
Vial number: 49
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No peaks
METHOD 300.0/9056A

This report has been created by IC Net
METROHM LTD

ALS Environmental
Analytical Run Coversheet

Analyst: JSJ   Analysis Date: 12/10/2013   Inst ID: J-IC-003

Analysis: Ion Chromatography   Method References: 300.0 / 9056

LIMS Analytical Batch Numbers Within This Analysis Run

STANDARD TRACABILITY

Stock Standard	Working Standards Made	Trace ID	Good Through
	Calibration Stds	IC03-83C	1/10/2014
	MRL Intermediate	IC03-81H	12/25/2013
	ICV	IC03-77C	1/10/2014

REAGENT TRACABILITY

Reagent Name	Trace ID	Good Through
Eluent	IC03-82I	12/17/2013

STANDARD CONCENTRATIONS AND RANGES

Element	MRL	UQL	ICV	CCV	LCS	Bomb LCS	Units
Fluoride	0.2	20	5	5	5	0	mg/L
Chloride	0.5	200	50	50	50	13.38	mg/L
Nitrite	0.2	20	5	5	5	0	mg/L
Bromide	0.2	20	5	5	5	0	mg/L
Nitrate	0.2	20	5	5	5	0	mg/L
OPO4	0.1	5	2.5	2.5	2.5	0	mg/L
Sulfate	0.5	200	50	50	50	321	mg/L

Comments

New Calibration

Reviewed By / Date: VP 12/~~10~~ 11/13

VP 12/11/13

IC RUN SEQUENCE

Instrument ID: J-IC-003

Analysis Date: 12/10/2013

INJ #	Sample ID	Analysis Date/Time	File ID	INJ #	Sample ID	Analysis Date/Time	File ID
1	Blank	12/10/13 19:22	xc101922.CHW				
2	CAL#1	12/10/13 19:39	xc101939.CHW				
3	CAL#2	12/10/13 19:55	xc101955.CHW				
4	CAL#3	12/10/13 20:11	xc102011.CHW				
5	CAL#4	12/10/13 20:27	xc102027.CHW				
6	CAL#5	12/10/13 20:43	xc102043.CHW				
7	CAL#6	12/10/13 20:59	xc102059.CHW				
8	CAL#7	12/10/13 21:15	xc102115.CHW				
9	CAL#8	12/10/13 21:31	xc102131.CHW				
10	CAL#9	12/10/13 21:47	xc102147.CHW				
11	ICV	12/10/13 22:19	xc102219.CHW				
12	ICB	12/10/13 22:35	xc102235.CHW				
13	MRL	12/10/13 22:51	xc102251.CHW				

VN

REPORTED DATA WITH FAILING CRITERIA

METHOD: 300.0 / 9056

Analysis Start Date:

mple ID	Analyte	Failure	Data File

IC Data Summary Sheet

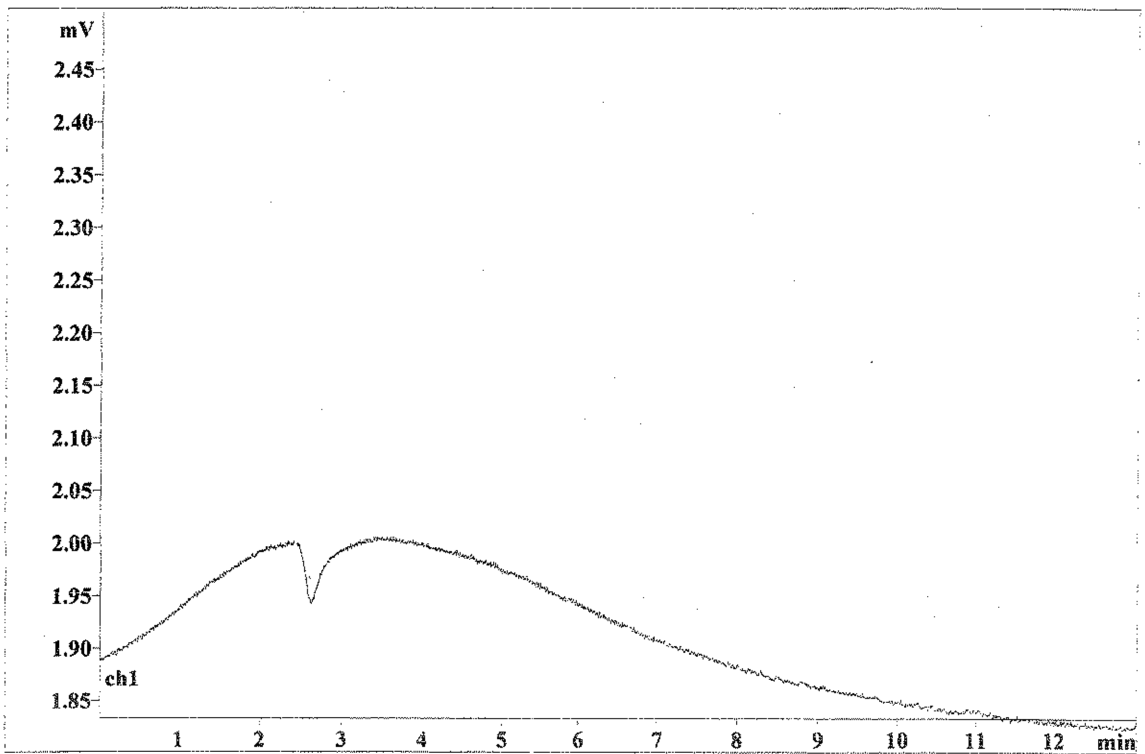
- DATA NOT REPORTED

Sample ID	DF	Analyte Concentrations (RAW) F~ (mg/L)	Cl (mg/L)	NO2 (mg/L)	Br (mg/L)	NO3 (mg/L)	OPO4 (mg/L)	SO4 (mg/L)	QC Recoveries F~	Cl	NO2	Br	NO3	OPO4	SO4	Sample Date/Time	File ID
Blank	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000								12/10/13 19:22	xc101922.CHW
CAL#1	1	0.176	0.607	0.167	0.174	0.186	0.090	0.692								12/10/13 19:39	xc101939.CHW
CAL#2	1	0.235	0.953	0.230	0.250	0.240	0.130	0.952								12/10/13 19:55	xc101955.CHW
CAL#3	1	0.451	2.178	0.447	0.442	0.436	0.246	1.930								12/10/13 20:11	xc102011.CHW
CAL#4	1	0.862	4.539	0.913	0.890	0.875	0.479	4.018								12/10/13 20:27	xc102027.CHW
CAL#5	1	2.446	12.252	2.472	2.335	2.418	1.229	11.622								12/10/13 20:43	xc102043.CHW
CAL#6	1	5.123	24.871	5.043	4.875	5.040	2.518	24.604								12/10/13 20:59	xc102059.CHW
CAL#7	1	10.217	50.653	10.207	10.682	10.363	4.998	51.327								12/10/13 21:15	xc102115.CHW
CAL#8	1	19.867	101.158	19.887	19.727	19.828	7.130	103.219								12/10/13 21:31	xc102131.CHW
CAL#9	1	0.000	199.289	0.000	0.000	0.000	0.000	198.135								12/10/13 21:47	xc102147.CHW
ICV	1	5.071	50.782	5.027	4.816	5.213	2.505	50.817	101.4 %	101.6 %	100.5 %	96.3 %	104.3 %	100.2 %	101.6 %	12/10/13 22:19	xc102219.CHW
ICB	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	< 0.2	< 0.5	< 0.2	< 0.2	< 0.2	< 0.1	< 0.5	12/10/13 22:35	xc102235.CHW
MRL	1	0.237	0.614	0.235	0.254	0.247	0.135	0.674	118.5%	122.8%	117.5%	127.0%	123.5%	135.0%	134.9%	12/10/13 22:51	xc102251.CHW

Report date: 12/11/2013 13:50:17
Printed by: Janet Jones

Ident: Blank
Analysis from: 12/10/2013 19:22:48
File: xc101922.CHW Last save: 12/11/2013 13:50:17
131210Cal
Method: ~~131007Cal~~.mtw Last save: 12/10/2013 13:07:05
Run operator: Janet Jones 12/11/13
Analysis number: 83264

Dilution: 1
LIMS ID: JQ1308867-01
Vial number: 13
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

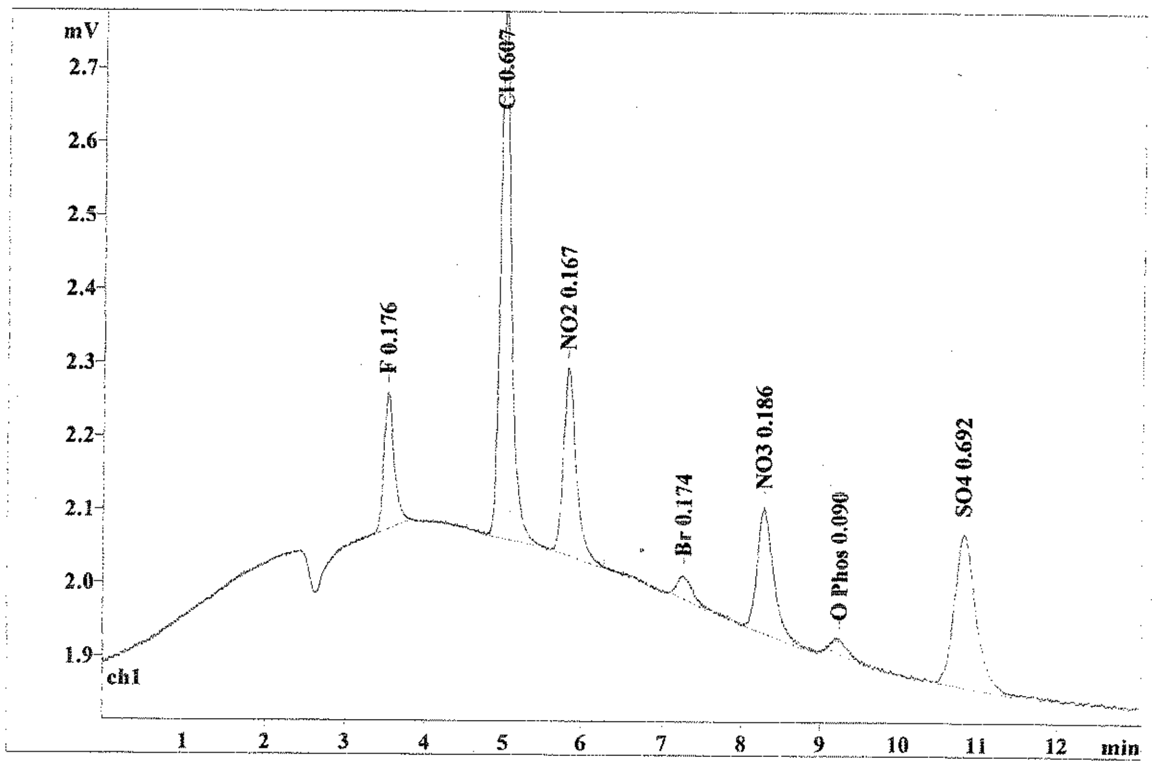
No peaks
METHOD 300.0/9056A

This report has been created by IC Net
METROHM LTD

Report date:	12/11/2013 13:50:19
Printed by:	Janet Jones

Ident:	CAL#1	
Analysis from:	12/10/2013 19:39:47	
File:	xc101939.CHW	Last save: 12/11/2013 13:50:19
Method:	131210Cal ~~131007Cal~~.mtw 12/11/13	Last save: 12/10/2013 13:07:05
Run operator:	Janet Jones	
Analysis number:	83265	

Dilution:	1
LIMS ID:	JQ1308867-01
Vial number:	15
Volume:	1.0 µL
Amount:	1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.53	0.131	0.19	1.642	0.88	0.1759	F
2	4.99	0.135	0.75	7.030	0.85	0.6067	Cl
3	5.83	0.161	0.26	2.867	0.85	0.1674	NO2
4	7.25	0.214	0.03	0.417	0.90	0.174	Br
5	8.28	0.216	0.17	2.515	0.86	0.1857	NO3
6	9.25	0.237	0.02	0.302	0.91	0.08997	O Phos
7	10.83	0.283	0.21	4.025	0.88	0.692	SO4
7	13.00	0.197	1.62	18.797	0.87	2.092	

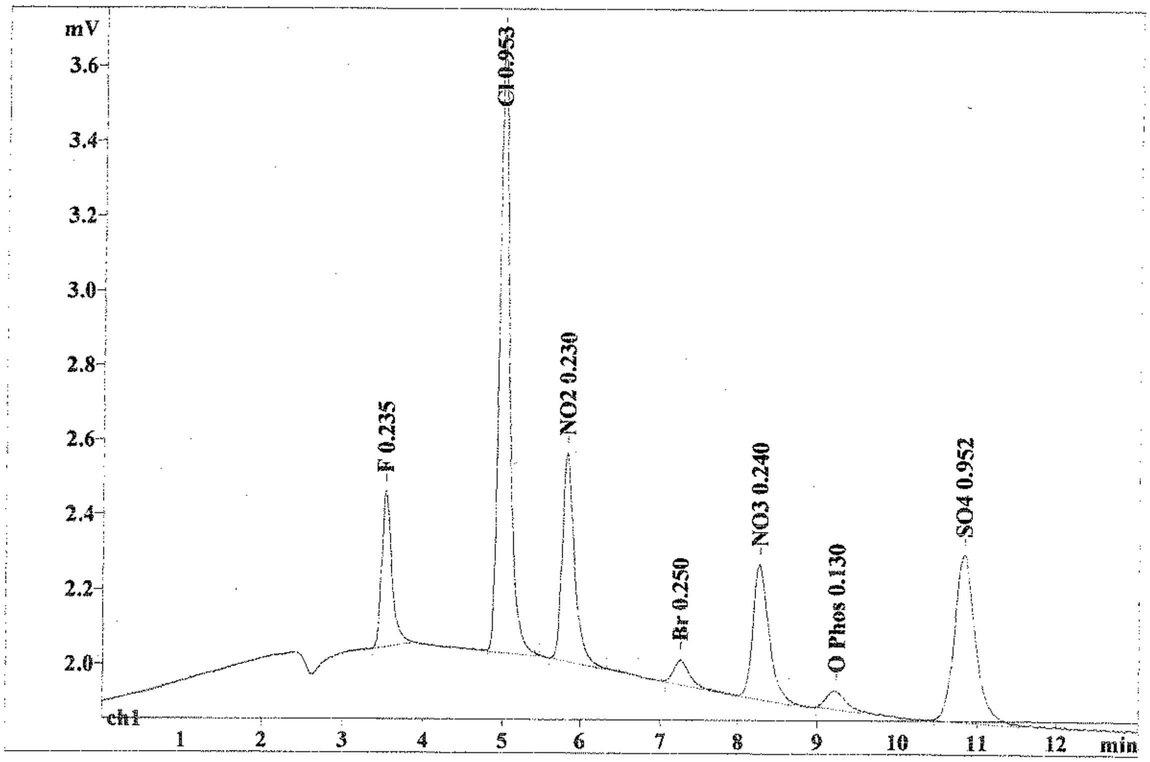
METHOD 300.0/9056A

This report has been created by IC Net
METROHM LTD

Report date: 12/11/2013 13:50:20
Printed by: Janet Jones

Ident: CAL#2
Analysis from: 12/10/2013 19:55:45
File: xc101955.CHW Last save: 12/11/2013 13:50:20
Method: ~~131007Cal~~ 131210Cal.mtw 12/11/13 Last save: 12/10/2013 13:07:05
Run operator: Janet Jones
Analysis number: 83266

Dilution: 1
LIMS ID: JQ1308867-01
Vial number: 16
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.53	0.127	0.42	3.671	0.85	0.2347	F
2	4.99	0.130	1.68	15.243	0.85	0.9528	Cl
3	5.83	0.155	0.56	6.048	0.85	0.2301	NO2
4	7.26	0.216	0.07	0.953	0.89	0.2497	Br
5	8.27	0.207	0.36	5.232	0.85	0.2401	NO3
6	9.24	0.261	0.05	0.896	0.85	0.1299	O Phos
7	10.83	0.270	0.45	8.409	0.87	0.9522	SO4
7	13.00	0.195	3.58	40.452	0.86	2.989	

METHOD 300.0/9056A

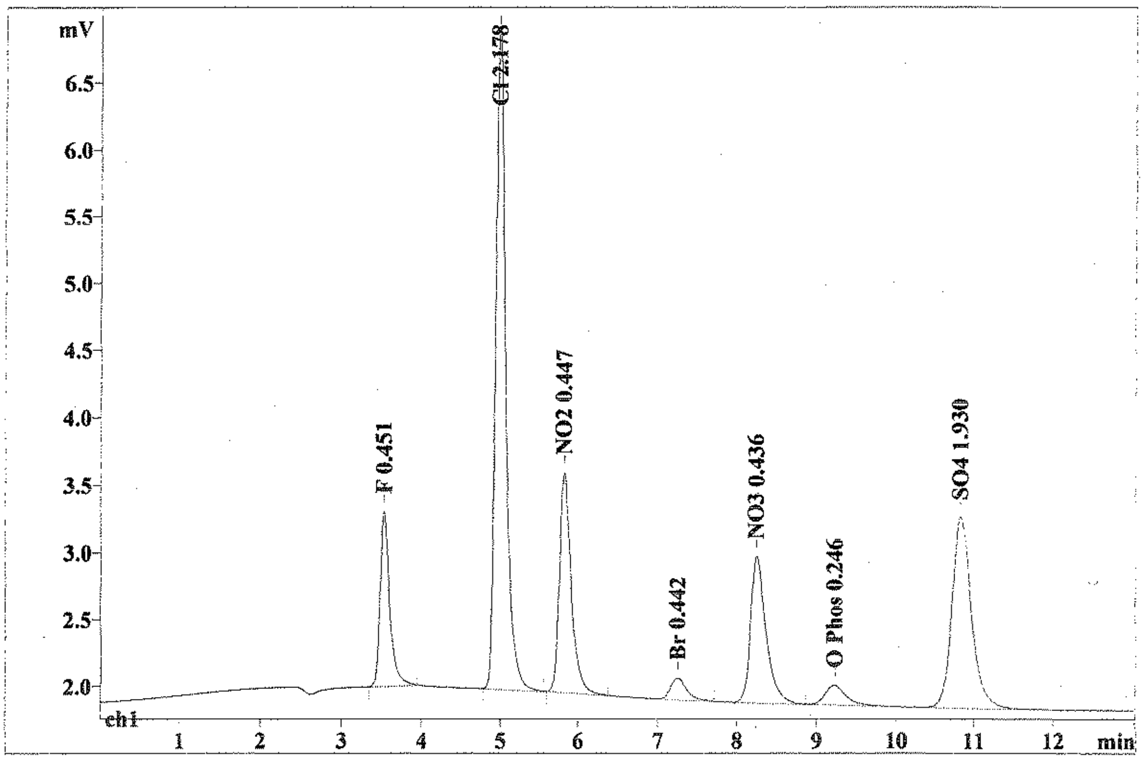
This report has been created by IC Net
METROHM LTD

Report date: 12/11/2013 13:50:21
Printed by: Janet Jones

Ident: CAL#3
Analysis from: 12/10/2013 20:11:45
File: xc102011.CHW Last save: 12/11/2013 13:50:20

Method: ~~131007Cal~~ 131210Cal.mtw Last save: 12/10/2013 13:07:05
Run operator: Janet Jones 12/11/13
Analysis number: 83267

Dilution: 1
LIMS ID: JQ1308867-01
Vial number: 17
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.52	0.121	1.31	11.104	0.86	0.4505	F
2	4.99	0.130	4.95	44.317	0.88	2.178	Cl
3	5.83	0.150	1.64	17.068	0.86	0.4474	NO2
4	7.25	0.211	0.16	2.318	0.90	0.4421	Br
5	8.25	0.198	1.10	15.049	0.86	0.4362	NO3
6	9.22	0.263	0.15	2.639	0.84	0.2465	O Phos
7	10.83	0.257	1.42	24.892	0.89	1.93	SO4
7	13.00	0.190	10.73	117.388	0.87	6.131	

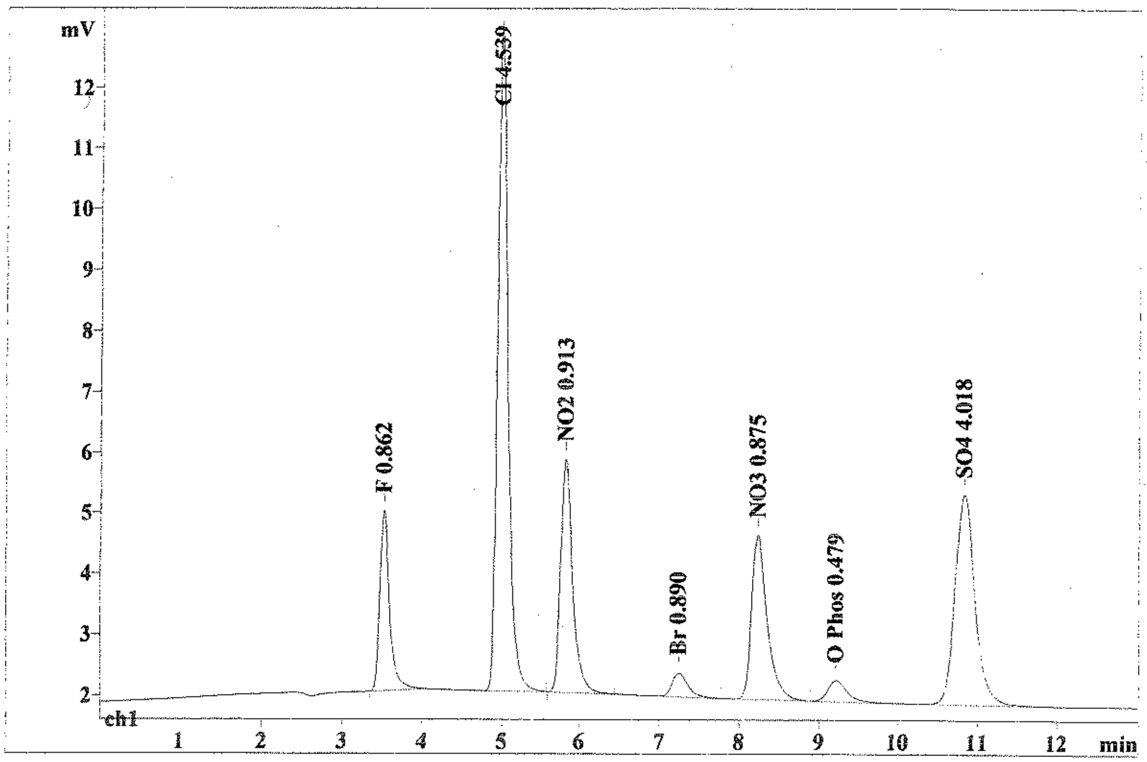
METHOD 300.0/9056A

This report has been created by IC Net
METROHM LTD

Report date: 12/11/2013 13:50:21
Printed by: Janet Jones

Ident: CAL#4
Analysis from: 12/10/2013 20:27:50
File: xc102027.CHW Last save: 12/11/2013 13:50:21
Method: ~~131007Cal~~ 131210cal.mtw Last save: 12/10/2013 13:07:05
Run operator: Janet Jones 12/11/13
Analysis number: 83268

Dilution: 1
LIMS ID:
Vial number: 18
Volume: 1.0 µL
Amount: 1.0000



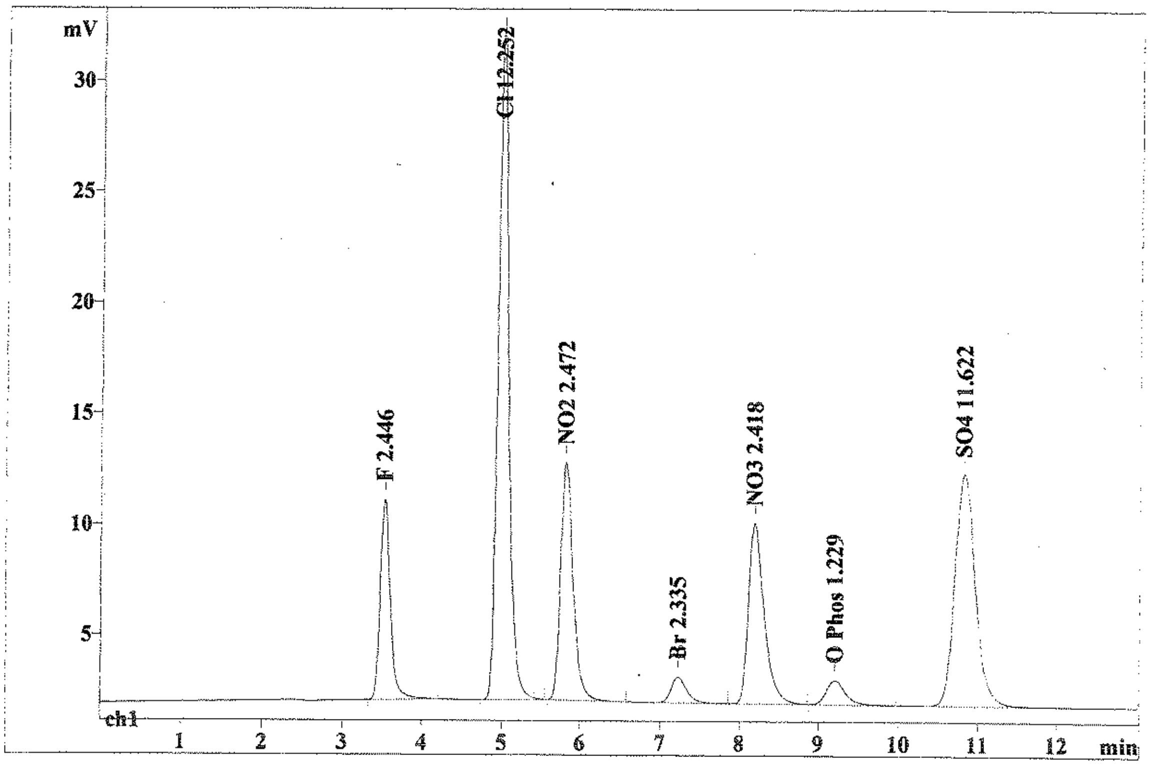
Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.53	0.123	2.96	25.247	0.88	0.8616	F
2	4.99	0.134	10.94	100.344	0.89	4.539	Cl
3	5.82	0.154	3.84	40.625	0.88	0.9134	NO2
4	7.24	0.206	0.39	5.514	0.88	0.89	Br
5	8.23	0.200	2.70	37.082	0.87	0.8748	NO3
6	9.22	0.253	0.35	6.166	0.85	0.4792	O Phos
7	10.83	0.259	3.45	60.088	0.92	4.018	SO4
7	13.00	0.190	24.63	275.067	0.88	12.58	

METHOD 300.0/9056A

This report has been created by IC Net
METROHM LTD

Report date:	12/11/2013 13:50:22	
Printed by:	Janet Jones	
Ident:	CAL#5	
Analysis from:	12/10/2013 20:43:49	
File:	xc102043.CHW	Last save: 12/11/2013 13:50:22
Method:	131210Cal ~~131007Cal~~.mtw	Last save: 12/10/2013 13:07:05
Run operator:	Janet Jones 12/11/13	
Analysis number:	83269	
Dilution:	1	
LIMS ID:		
Vial number:	19	
Volume:	1.0 µL	
Amount:	1.0000	



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.52	0.127	9.09	79.501	0.91	2.446	F
2	4.98	0.137	30.38	283.351	0.89	12.25	Cl
3	5.81	0.164	10.77	118.721	0.92	2.472	NO2
4	7.23	0.202	1.17	16.014	0.91	2.335	Br
5	8.19	0.209	8.18	115.405	0.90	2.418	NO3
6	9.21	0.238	1.10	17.969	0.88	1.229	O Phos
7	10.82	0.271	10.50	188.462	0.95	11.62	SO4
7	13.00	0.193	71.19	819.423	0.91	34.77	

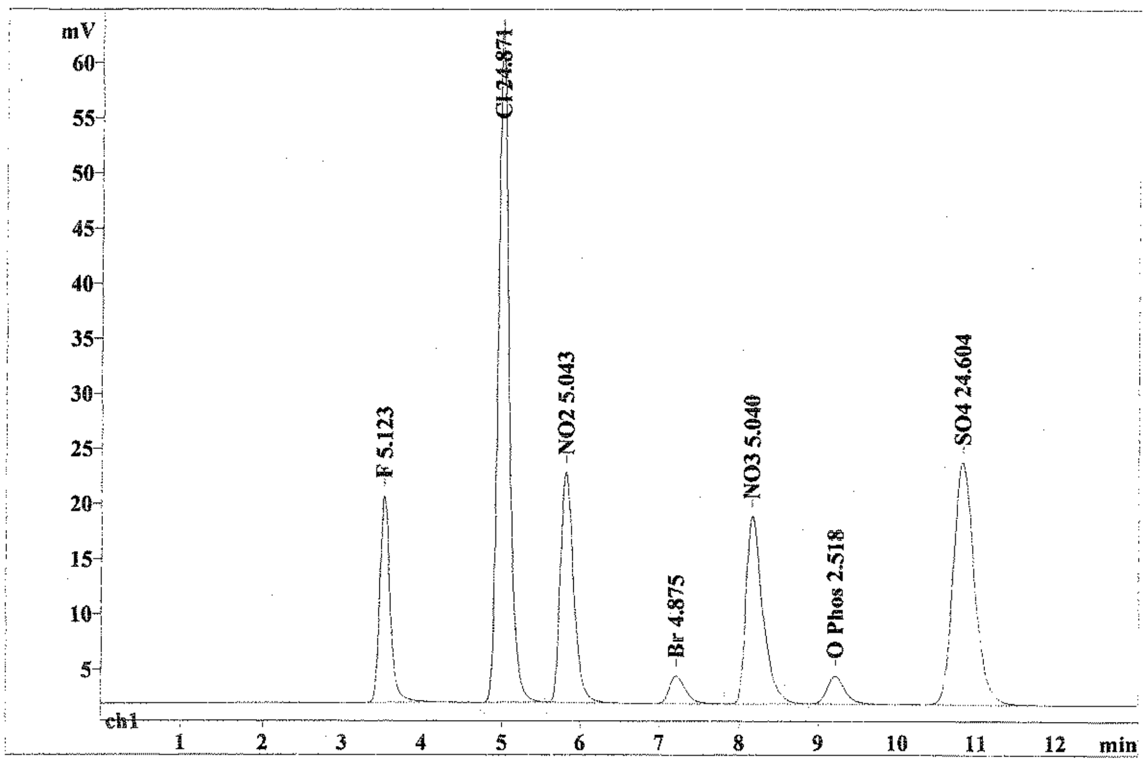
METHOD 300.0/9056A

This report has been created by IC Net
METROHM LTD

Report date: 12/11/2013 13:50:23
Printed by: Janet Jones

Ident: CAL#6
Analysis from: 12/10/2013 20:59:49
File: xc102059.CHW Last save: 12/11/2013 13:50:23
1312 10Cal
Method: ~~131007Cal~~.mtw 12/11/13 Last save: 12/10/2013 13:07:05
Run operator: Janet Jones
Analysis number: 83270

Dilution: 1
LIMS ID:
Vial number: 20
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.53	0.134	18.74	170.324	0.93	5.123	F
2	4.99	0.140	61.23	582.570	0.89	24.87	Cl
3	5.81	0.177	20.87	245.150	0.94	5.043	NO2
4	7.22	0.211	2.53	35.226	0.95	4.875	Br
5	8.16	0.220	16.99	251.702	0.90	5.04	NO3
6	9.21	0.235	2.53	40.157	0.91	2.518	O Phos
7	10.82	0.281	21.99	408.340	0.95	24.6	SO4
7	13.00	0.200	144.86	1733.468	0.92	72.07	

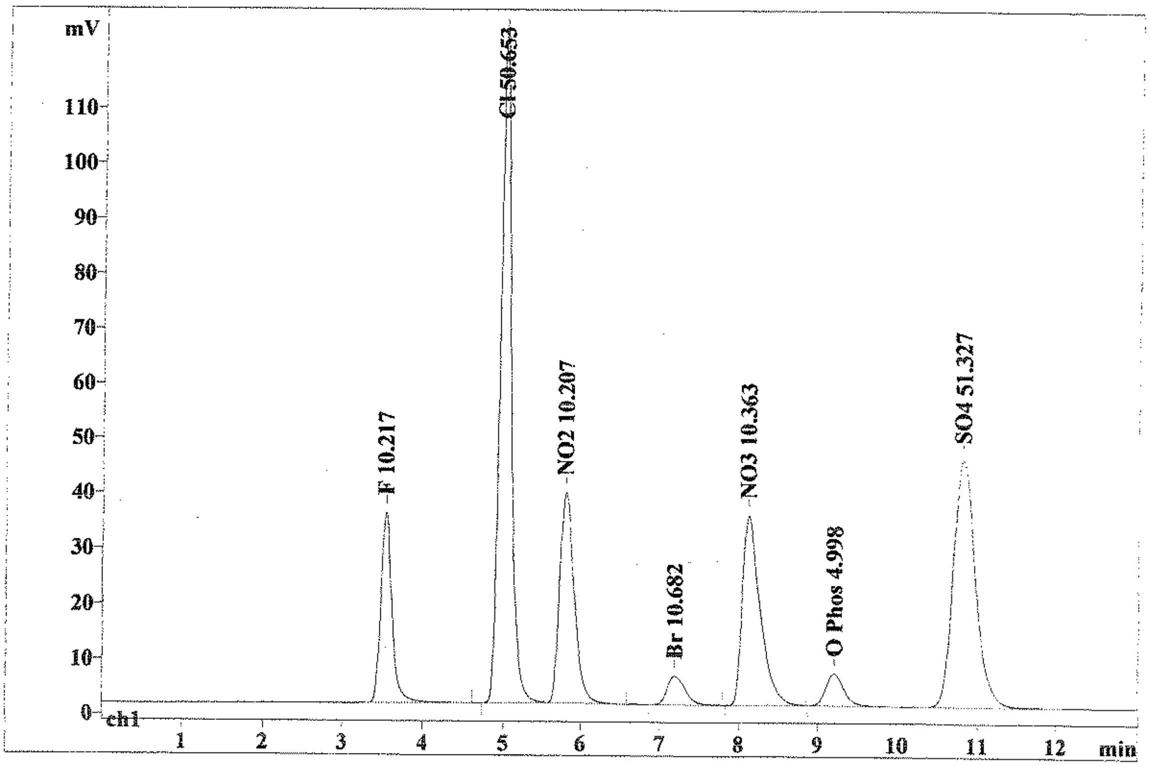
METHOD 300.0/9056A

This report has been created by IC Net
METROHM LTD

Report date: 12/11/2013 13:50:24
Printed by: Janet Jones

Ident: CAL#7
Analysis from: 12/10/2013 21:15:49
File: xc102115.CHW Last save: 12/11/2013 13:50:24
131210cal
Method: ~~131007Cal~~.mtw Last save: 12/10/2013 13:07:05
Run operator: Janet Jones 12/11/13
Analysis number: 83271

Dilution: 1
LIMS ID:
Vial number: 21
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.54	0.144	34.49	340.253	0.93	10.22	F
2	5.00	0.142	122.83	1193.272	0.89	50.65	Cl
3	5.80	0.197	38.05	491.096	0.96	10.21	NO2
4	7.19	0.250	5.25	83.652	1.04	10.68	Br
5	8.11	0.234	34.30	541.852	0.89	10.36	NO3
6	9.21	0.241	5.89	94.331	0.94	4.998	O Phos
7	10.81	0.291	44.80	863.703	0.93	51.33	SO4
7	13.00	0.214	285.61	3608.160	0.94	148.4	

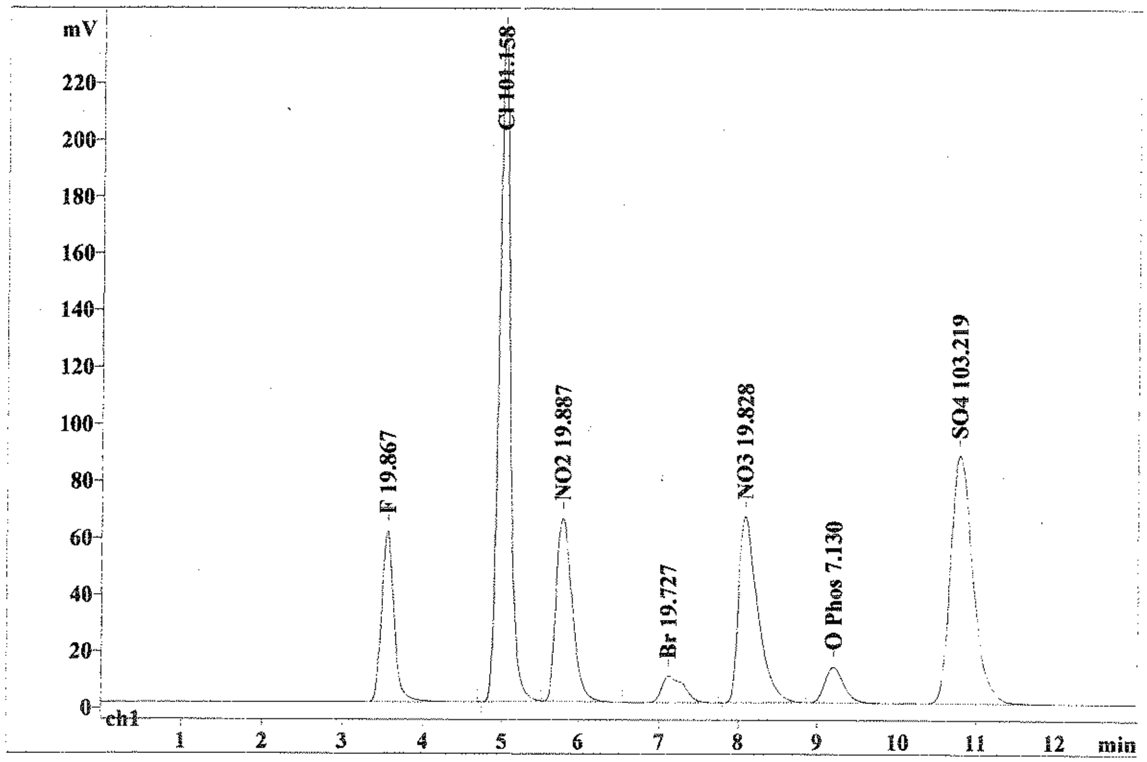
METHOD 300.0/9056A

This report has been created by IC Net
METROHM LTD

Report date: 12/11/2013 13:50:25
Printed by: Janet Jones

Ident: CAL#8
Analysis from: 12/10/2013 21:31:48
File: xc102131.CHW Last save: 12/11/2013 13:50:25
131210cal
Method: ~~131007Cal~~.mtw Last save: 12/10/2013 13:07:05
Run operator: Janet Jones 12/11/13
Analysis number: 83272

Dilution: 1
LIMS ID:
Vial number: 22
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.55	0.161	60.20	652.534	0.96	19.87	F
2	5.02	0.149	237.69	2387.174	0.91	101.2	Cl
3	5.79	0.222	64.75	926.860	1.00	19.89	NO2
4	7.12	0.323	9.40	180.390	1.15	19.73	Br
5	8.08	0.251	65.69	1114.548	0.89	19.83	NO3
6	9.20	0.248	12.63	205.939	0.95	7.13	O Phos
7	10.79	0.303	87.54	1758.957	0.93	103.2	SO4
7	13.00	0.237	537.91	7226.401	0.97	290.8	

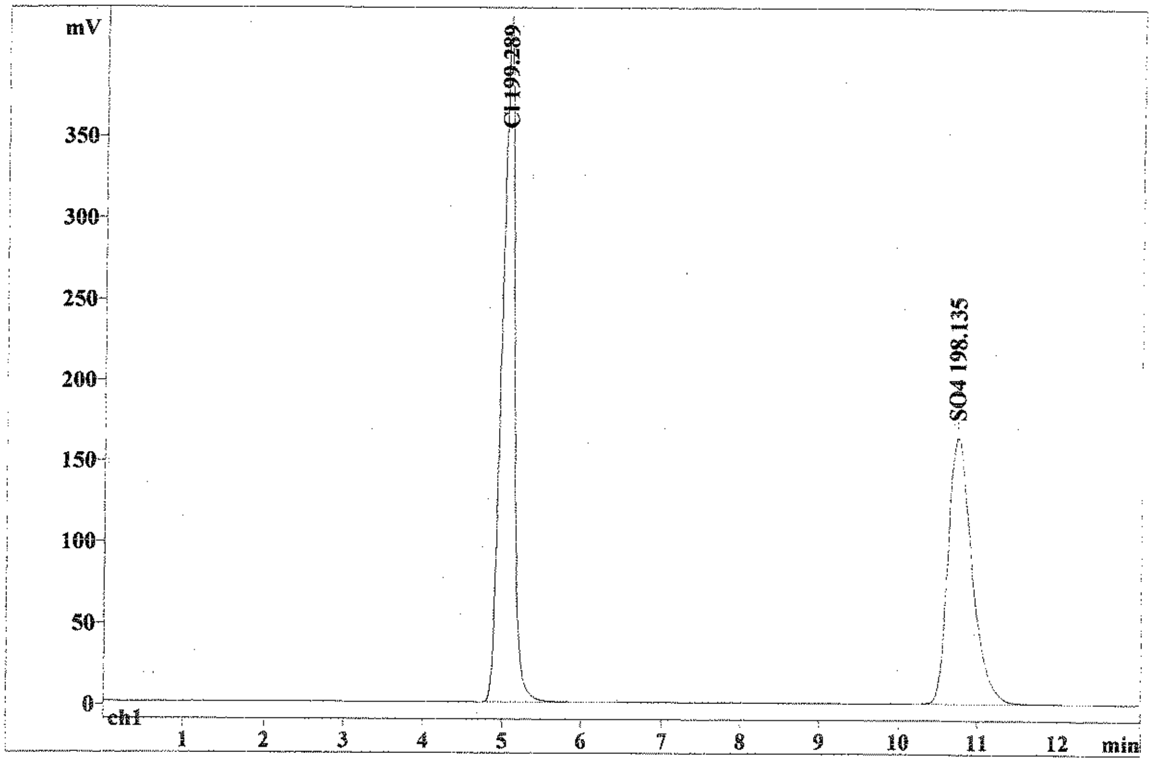
METHOD 300.0/9056A

This report has been created by IC Net
METROHM LTD

Report date: 12/11/2013 13:50:26
Printed by: Janet Jones

Ident: CAL#9
Analysis from: 12/10/2013 21:47:47
File: xc102147.CHW Last save: 12/11/2013 13:50:26
Method: ~~131007Cal~~ 131210cal.mtw Last save: 12/10/2013 13:07:05
Run operator: Janet Jones 12/11/13
Analysis number: 83273

Dilution: 1
LIMS ID:
Vial number: 23
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	0.00	0.000	0.00	0.000	0.00	0	F
2	5.07	0.173	416.93	4697.769	0.98	199.3	Cl
3	0.00	0.000	0.00	0.000	0.00	0	NO2
4	0.00	0.000	0.00	0.000	0.00	0	Br
5	0.00	0.000	0.00	0.000	0.00	0	NO3
6	0.00	0.000	0.00	0.000	0.00	0	O Phos
7	10.74	0.315	163.99	3436.142	0.93	198.1	SO4
7	13.00	0.070	580.92	8133.911	0.27	397.4	

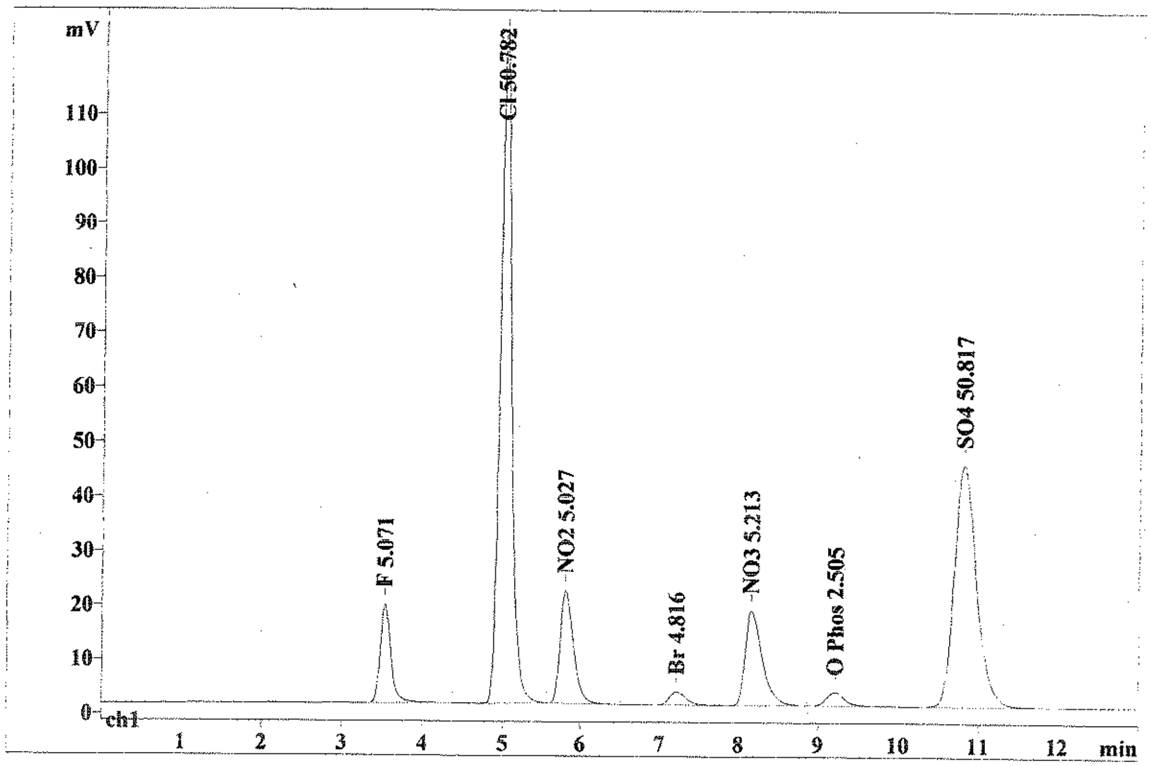
METHOD 300.0/9056A

This report has been created by IC Net
METROHM LTD

```
Report date:          12/11/2013 13:50:27
Printed by:           Janet Jones

Ident:                ICV
Analysis from:        12/10/2013 22:19:45
File:                 xc102219.CHW              Last save: 12/11/2013 13:50:27
                      131210cal
Method:               131007Cal.mtw              Last save: 12/10/2013 13:07:05
Run operator:         Janet Jones 12/11/13
Analysis number:      83275

Dilution:               1
LIMS ID:
Vial number:          25
Volume:               1.0 µL
Amount:               1.0000
```



Quantitation method: Custom

No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.53	0.136	18.11	168.586	0.92	5.071	F
2	5.00	0.142	123.66	1196.323	0.89	50.78	Cl
3	5.81	0.178	20.79	244.405	0.94	5.027	NO2
4	7.21	0.222	2.39	34.770	0.97	4.816	Br
5	8.16	0.222	17.45	260.800	0.90	5.213	NO3
6	9.21	0.236	2.50	39.918	0.91	2.505	O Phos
7	10.81	0.290	44.46	854.976	0.94	50.82	SO4
7	13.00	0.204	229.37	2799.777	0.92	124.2	

METHOD 300.0/9056A

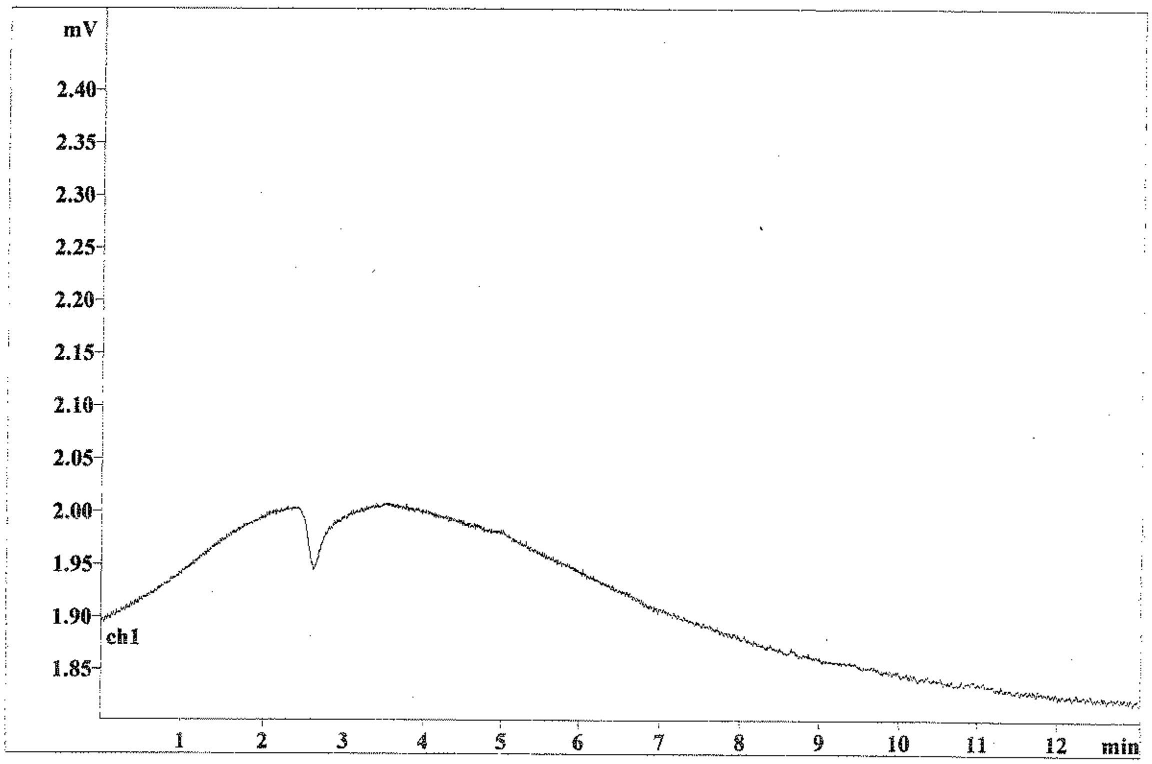
This report has been created by IC Net
METROHM LTD

Report date: 12/11/2013 13:50:28
Printed by: Janet Jones

Ident: ICB
Analysis from: 12/10/2013 22:35:44
File: xc102235.CHW Last save: 12/11/2013 13:50:28

Method: ~~131007Cal~~ 131210 cal .mtw Last save: 12/10/2013 13:07:05
Run operator: Janet Jones 12/11/13
Analysis number: 83276

Dilution: 1
LIMS ID:
Vial number: 26
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

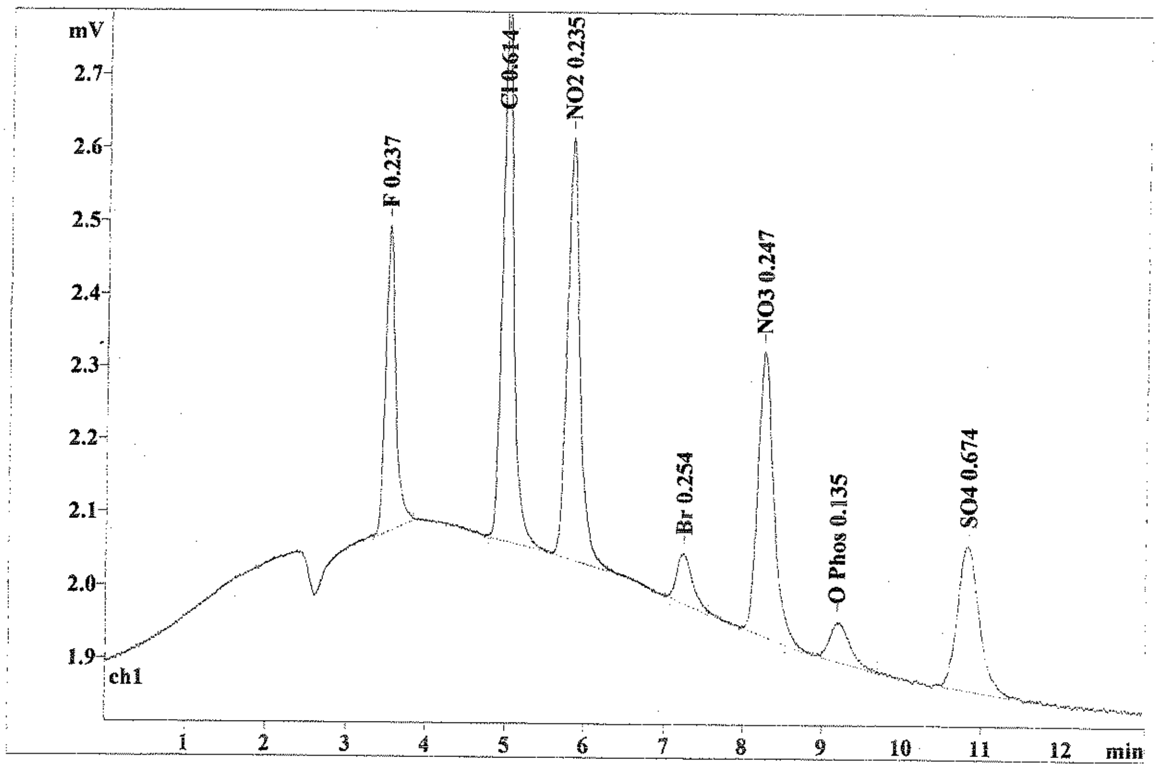
No peaks
METHOD 300.0/9056A

This report has been created by IC Net
METROHM LTD

Report date: 12/11/2013 13:50:29
Printed by: Janet Jones

Ident: MRL
Analysis from: 12/10/2013 22:51:49
File: xc102251.CHW Last save: 12/11/2013 13:50:29
Method: ~~131007Cal~~ 131210cal.mtw Last save: 12/10/2013 13:07:05
Run operator: Janet Jones 12/11/13
Analysis number: 83277

Dilution: 1
LIMS ID:
Vial number: 27
Volume: 1.0 µL
Amount: 1.0000



Quantitation method: Custom

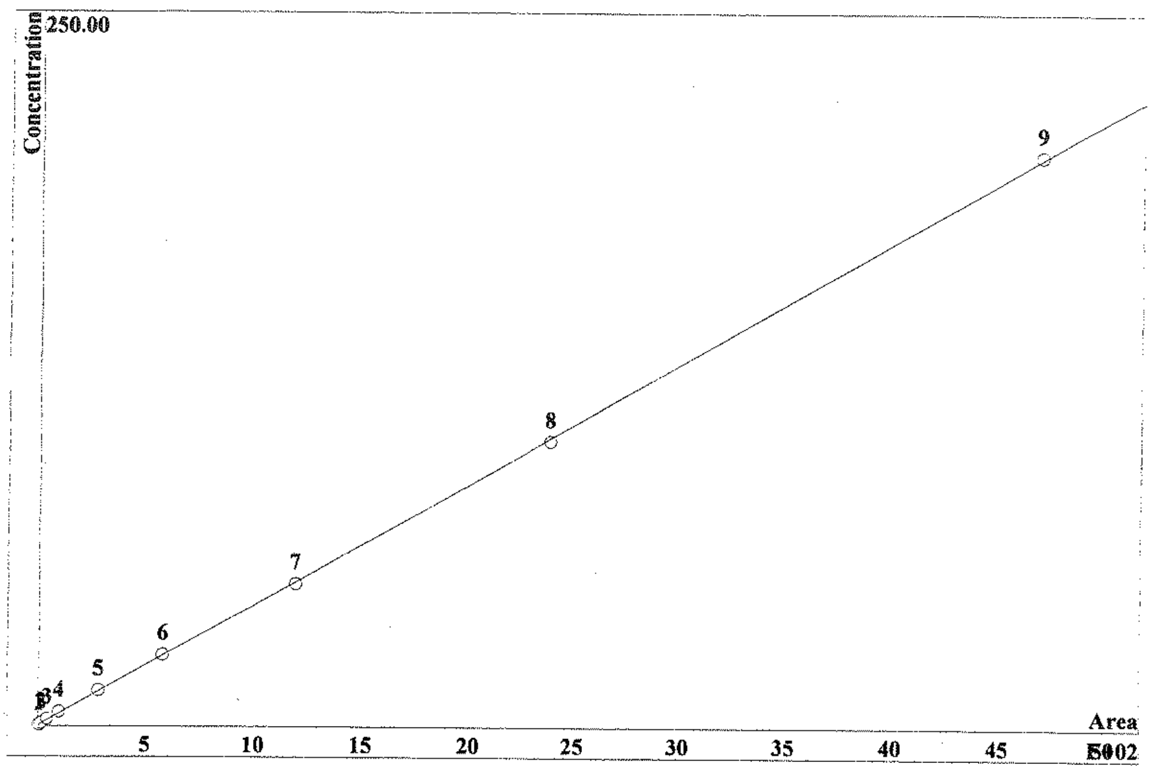
No	Retention min	Width/2 min	Height mV	Area mV*sec	Gaussian	Amount	Name
1	3.51	0.129	0.42	3.735	0.86	0.2366	F
2	4.98	0.136	0.76	7.208	0.85	0.6142	Cl
3	5.81	0.158	0.58	6.320	0.86	0.2354	NO2
4	7.25	0.219	0.07	0.981	0.88	0.2537	Br
5	8.25	0.208	0.39	5.601	0.86	0.2474	NO3
6	9.18	0.271	0.05	0.977	0.90	0.1353	O Phos
7	10.82	0.282	0.20	3.729	0.90	0.6745	SO4
7	12.99	0.200	2.47	28.551	0.87	2.397	

METHOD 300.0/9056A

This report has been created by IC Net
METROHM LTD

CALIBRATION OF COMPONENT C1

Method: ~~131007Cal~~ 131210cal.mtw 12/11/13
Equation: $Q = 4.78122e{-}08 \cdot A^2 + 0.0421314 \cdot A + 0.310544$
RSD: 2.366 %
Correlation coefficient: 0.999951



K3 = 0   K2 = 4.78122e-08   K1 = 0.0421314   K0 = 0.310544
Base: Area
Ref.channel: ch1
ISTD:
Formula: Quadratic
Weight: 1/X

Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1	0.7475	7.03	0.5	1	5.005	Yes	xc101939.chw
2	1.674	15.24	1	1	5.005	Yes	xc101955.chw
3	4.949	44.32	2.5	1	5.005	Yes	xc102011.chw
4	10.94	100.3	5	1	5.005	Yes	xc102027.chw
5	30.38	283.4	12.5	1	5.005	Yes	xc102043.chw
6	61.23	582.6	25	1	5.005	Yes	xc102059.chw
7	122.8	1193	50	1	5.005	Yes	xc102115.chw
8	237.7	2387	100	1	5.005	Yes	xc102131.chw
9	416.9	4698	200	1	5.005	Yes	xc102147.chw